DOCUMENT RESUME

ED 041 854	24	SP 004 112

AUTHOR	Bothner, Gerald; And Others
TITLE	Quantitative and Qualitative Effects of Revised Selection and Training Procedures in the Education of Teachers of the Culturally Disadvantaged. Volume III. Final Report. Appendixes E-R.
INSTITUTION	Wisconsin State Univ., Oshkosh.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO	BR-9-0007
PUB DATE	Jun 70
GRANT	OEG-0-077946-1734
NOTE	123p.
EDRS PRICE	EDRS Price MF-$0.50 HC-$6.25
DESCRIPTORS	Bibliographies, *Biological Sciences, Curriculum Guides, *Earth Science, Educationally Disadvantaged, Effective Teaching, English Curriculum, Personal Growth, *Physical Sciences, *Psychology, Seminars, Teacher Education, *Teacher Education Curriculum, Teaching Techniques
IDENTIFIERS	Nuffield Foundation Biology Course

ABSTRACT

Appendix E is a proposal for a biological science course for prospective elementary teachers. The major topics covered are 1) the perpetuation of life; 2) the maintenance of life; 3) living things in action; 4) living things in relationship to their environment. A weekly course schedule is also included. Appendix F is a proposal for preservice training in earth science, with lecture and laboratory schedules. Appendix G reviews a preservice physical science course, appendixes H and I, the general psychology course, and appendix J, the English composition course. Appendix K gives profiles of the students in the project. Appendix L contains the leaders' reports on the personal development seminars. Appendix M describes the results of the summer 1969 work experience program, with tables evaluating attitudes and experience. Appendix N is the College Descriptive Inventory, intended to measure the meaning of certain concepts related to college life. Appendix O is an outline for a personal development seminar. Appendix P is the proposal to the Executive Council of the University for a modified program to start in September 1970. Appendix Q is the charter of the Academic Advancement Cooperative. Appendix R is a selected bibliography of materials concerning college student attrition, underachievement, and talent loss. (MBM) (See also SP 004 109, SP 004 110 and SP 004 111.)

.BR 9-0007
PA 24
SP

ED041854

FINAL REPORT
VOLUME III

Project No. 9-0007
Contract No. OEG-0-8-077946-1734

QUANTITATIVE AND QUALITATIVE EFFECTS OF REVISED SELECTION AND TRAINING PROCEDURES IN THE EDUCATION OF TEACHERS OF THE CULTURALLY DISADVANTAGED

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

David L. Bowman, Dean
School of Education
Wisconsin State University - Oshkosh
Oshkosh, Wisconsin

June - 1970

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

Office of Education
Bureau of Research

SP004112

APPENDIX E

Supplementary to
RESEARCH PROJECT
TEACHERS FOR THE CULTURALLY DISADVANTAGED

BIOLOGICAL SCIENCE COURSE PROPOSAL

Gerald Bothner
Ronald K. Gibbs

Wisconsin State University at Oshkosh

RECOMMENDATIONS FOR THE TRAINING OF PROSPECTIVE ELEMENTARY TEACHERS IN THE AREA OF BIOLOGY

The development of a course in biology, for elementary teachers, must necessarily be effected through the use of carefully selected guidelines. After considerable research and deliberation we have adopted the following guidelines:

1. Attention must be directed toward two aspects of the science program--the dimension of knowledge or content, and the dimension of performance or process.

    a. Instruction in biology should be conducted in such a way that prospective elementary teachers will develop an understanding of processes and scientific inquiry.

    b. The program for the biological preparation of the prospective elementary teacher should include a breadth of preparation most appropriate for the elementary school program.

    c. To be effective, each dimension must become the vehicle for the development of the other.

2. The program for the biological preparation of the prospective elementary teacher should develop an appreciation of the esthetic aspects of biology through individual experiences and discoveries.

3. The program for the biological preparation of the prospective elementary teacher should include techniques applicable to the teaching of biological concepts in the elementary school.

4. The program for the biological preparation of the prospective elementary teacher should take into account the biological concepts and methods employed in recent curricular developments.

5. The program for the biological preparation of the prospective elementary teacher should be based on recommendations made by the various agencies concerned with teacher certification.

Following the development of the preceding guidelines a literature search was conducted. The following materials were reviewed for the purpose of determining the content and techniques most appropriate to the training of the prospective elementary teacher in the area of biology.

BIOLOGICAL SCIENCE COURSE PROPOSAL
Gerald Bothner
Ronald K. Gibbs

1. The standards set forth by the National Council for Accreditation of Teacher Education (NCATE);

2. Recommendations suggested as a result of the study sponsored by the National Association of State Directors of Teacher Education and Certification (NASDTEC) in cooperation with the American Association for the Advancement of Science (AAAS) and supported by the Carnegie Corporation of New York;

3. The National Society for the Study of Education Yearbooks (NSSE - 31st, 46th, 59th);

4. Recent elementary science textbook series;

5. Recent elementary science curricular developments, e. g. AAAS, SCIS, ESS, ESSP, etc.;

6. Various city and state curriculum guides;

7. High school biology textbooks;

8. The Biological Sciences Curriculum Study (BSCS) materials;

9. College biology textbooks;

10. Course outlines used in previous biology courses for the preparation of elementary teachers.

This research, together with the established guidelines has led to the following recommendations for a one semester, four credit biology course for prospective elementary teachers.

RATIONALE FOR COURSE SELECTION

Early in 1962 the Nuffield Foundation of Great Britain established a science teaching project with the objectives of making science "intelligible and accessible to people of all kinds in schools of all kinds, and to make science a more useful tool, both intellectually and practically". After four years of extensive development and revisions in 170 schools, a five volume set of integrated laboratory and textual materials in biology were published. The first two volumes are introductory with a general treatment of biological concepts and methods. The last three volumes are more quantitative in their approach to biological experimentation and reasoning. Although the five volumes are written for the British student who would be in school during the ages of 11 through 16, we felt the last three volumes were so unique and challenging so as not to replicate or rehash a typical sophomore high school biology course as taught in the United States. Using a complete innovative approach to biology might well lend itself to a beginning college biology course for elementary education majors. With this rationale in mind, we decided to adopt the Nuffeld Biology Course (with modications) for potential teachers of the disadvantaged.

NUFFELD FOUNDATION BIOLOGY COURSE

Philosophy

The philosophical basis for Nuffield biology is clearly that of inquiry: "The course is designed to foster a critical approach to the subject with an emphasis on experimentation and inquiry rather than on the mere assimilation of facts." This "inquiry approach" is implemented in the following ways:

1. Student-centered activities. The materials are constructed to elicit student participation in the form of discussion and open-ended laboratory investigation. The teacher's role becomes that of a guide who uses his knowledge, understanding, and skill to help his students find answers to their questions. Discussion between teacher and students is used to aid in the revision and evaluation of student work and in the development of hypotheses for testing in the laboratory.

2. Integration of laboratory and text. It is relatively easy to insert a laboratory exercise into a prose passage, but Nuffield writers have achieved a much more sophisticated goal--a well done pedagogical integration. The text and laboratory flow together imperceptibly, creating a tremendous drive on the reader's part to "find out what happens." The following pattern of presentation is typical: first, a problem is posed in the text; second, possible experimental approaches to the problem are suggested; and third, the text resumes with the assumption that the student now has the data necessary to solve the problem. Subsequent reading depends on successful completion of the laboratory activity. For example, the text states "... what happens when we breathe, ...?" (The problem), "A simple apparatus like that in figure 2 is often used to compare inhaled and exhaled air." (The suggested experimental approach), and "Your experiments so far will probably have led you to suggest a hypothesis about man and carbon dioxide. Based on the results ..." (The use of the student's data by the text to build further concepts and pose further problems.)

BIOLOGICAL SCIENCE COURSE PROPOSAL

Gerald Bothner
Ronald K. Gibbs

Most biology teachers would agree that an introductory biology course should equip students to make responsible decisions when faced with problems involving biological principles. It is generally assumed that the student will be able to make the transfer from a theoretical foundation to a practical situation. Nuffield biology attempts to bridge the gap between theory and technology, between biology and other fields of human endeavor. The problem of smoking is discussed in conjunction with a theoretical consideration of breathing and respiration; the biological rationalization of Nazi philosophy is integrated with the study of genetic principles. This unobtrusive marriage of the practical and the theoretical could well serve as a model for U.S. biological education.

Nuffield biology departs from the BSCS in the use of the closely integrated lab-text, the deemphasis of the text as basically an information source, the lact of a set sequence to the course, and heavy emphasis on the importance of models to scientific inquiry. Both the BSCS and the Nuffield Foundation have an 8mm film series, but beyond using the same media all other similarity ceases. The BSCS loops are designed to involve the student in a dynamic inquiry experience. The Nuffield loops have only an illustrative purpose: to demonstrate dynamic biological processes such as the feeding mechanism of the housefly, laboratory techniques, experiments, which could not be carried out in a school, and phenomena involving chains of biological events such as a food chain.

PREFACE TAKEN FROM NUFFIELD BIOLOGY TEACHERS' GUIDE

Teaching Methods

Teaching is so much a personal art that it would be wrong to suggest any single, rigid approach. At the same time we must remember that a course very largely succeeds or fails because of the way it is taught. How we teach is certainly as important as what we teach.

This course incorporates a selection of those teaching methods that appear to us to be most suitable for attaining its aims. Although it is written as a coherent whole, many teachers, (initially, at least)may feel unable to adopt it in its entirety. They may lack the proper facilities, time, or experience. Moreover, they may wish to adapt it to suit their own particular circumstances.

Such considerations need not stand in the way of change. We believe, however, that where a reduced course is planned it should have the same broad structure as the text. The aims of the project will not be achieved without proper attention to its main themes and principles. For example, the later years of the course include studies in population problems, genetics, and physiology. But the speical circumstances of a school may well lead to a particular emphasis being placed on one or more of these aspects of biology.

Where time is limited, secondhand evidence can, with discretion, be substituted for class practicals. If parallel classes are following the same course it will sometimes be possible for them to exchange findings from different investigations. Moreover, teacher demonstration can, on occasions, be as effective in making a point as a class practical - or even more so. In such ways much can be done to overcome difficulties imposed by lack of time and facilities.

Aims of the Course

These aims can be summarized briefly as follows:

a. To develop and encourage an attitude of curiosity and inquiry.

b. To develop a contemporary outlook on the subject.

c. To develop an understanding of man as a living organism and his place in nature:

1. The usefulness and social implications of biology in relation to man's everyday needs, e.g. food and public health.

2. The profound influence of man's activities on other organisms.

3. The way in which a study of biology enables man to interpret observations that he makes in everyday life, e.g. the distribution of plants and animals.

d. To foster a realization of the variety of life and of underlying similarities among living things.

e. To encourage a respect and feeling for all living things.

f. To teach the art of planning scientific investigations, the formulation of questions, and the design of experiments (particularly the use of controls).

g. To develop a critical approach to evidence.

h. To develop the following ideas about biology as part of human endeavour.

BIOLOGICAL SCIENCE COURSE PROPOSAL

Gerald Bothner
Ronald K. Gibbs

1. Biology has been developing over many centuries: there are many unanswered questions about life; our ideas of life may change as new knowledge is obtained.

2. That biological knowledge is the product of scientists working in many different parts of the world. Its pursuit is international.

3. That it is based not only on observation and experimentation but also on questioning, the formulation of hypotheses, testing of hypotheses, and, above all, on communication between people.

4. That developments in chemistry, physics, and mathematics are helping us to make advances in biology.

Preparation and Homework

Preparation and homework constitute an integral part of any course of teaching. As far as the Nuffield O-Level Biology Course is concerned, prepared work can fulfill an important role in helping to ensure that the atmosphere of inquiry which we have tried to build up during school hours is not broken every time a pupil leaves the laboratory. Inevitably, a certain amount of time out-of-school will have to be devoted to the writing of practical work (see 'Long-term investigations'), but we suggest that this is kept to a minimum. Following the advice of the majority of teachers engaged in the preliminary trials of the course, we have not included lists of questions at the end of each chapter. However, in developing each topic in the text we have posed numerous questions to which we have frequently not supplied the answers. These can provide useful material for homework. Further suggestions are made in various sections of the guide. At the end of most chapters in the text we have included a section entitled 'Background reading' - usually an extension of some topic which has not been possible to develop fully elsewhere. We hope this may also play a part in stimulating additional reading out of school hours, We suggest that such reading could also provide a link between the teaching of Biology and English in a school; essays and discussions might well be based on some of the topics included. Background reading will not be examined in G. C. E. However, we strongly suggest that pupils should look upon it as an integral part of the Course.

Using the Text

In writing the text we have borne the following considerations particularly in mind.

a. We have tried to avoid giving the impression that the text is intended to usurp the position of the teacher in relation to the class. On the contrary, we have attempted to suggest in the text and guide a sufficient variety of teaching approaches to enable a teacher to develop those most suited to his own particular aptitudes and personality. Wherever possible, however, we have tried to cut down the time spent in class on purely routine activities. For instance, we have attempted to provide a logical introduction to all practical work and adequate instructions for carrying it out in the hope that this will minimize the amount of time spent on preliminary demonstration of equipment and the detailed explanation of techniques. More of the teacher's time can thus be spent in discussion and dealing with the problems of particular pupils. Similarly, the introductory material on a topic can be read by the pupils for preparation in order to save time in class.

b. The text is intended to provide a clear indication of the overall structure of the course. This includes the main divisions of the subject matter; how different topics are related to one another; how the subject matter can be approached in an investigatory manner similar to a scientific enquiry; and how first-hand information (derived from the laboratory) and secondhand information (obtained from the books and film loops) can be related to one another.

c. Throughout the text numerous opportunities are provided for initiating simple investigations and formulating hypotheses; questions are posed to which the answers are not, at once, given. In fact, the appropriate results or answers may well be incorporated in subsequent material, but we hope that the method of presentation does not make this too obvious when the pupils are first faced with an open-ended situation.

d. Where investigations cannot be conducted on living organisms, models have sometimes been devised to simulate the structures or functions being investigated. Care is needed to keep the model situations closely related to those obtained in the living things themselves.

e. No separate laboratory manual has been produced for the course. The text includes details of all laboratory work, our aim being to enable students to carry out individual or group experiments and investigations with the minimum of technical help. Where techniques requiring a number of manipulative processes are involved, the sequence of events has been summarized for easy reference in the form of flow diagrams.

Teaching and Inquiry

One of the principal aims of the Nuffield Biology Course has been to foster a critical approach to the subject with an emphasis on experimentation and enquiry rather than on mere factual assimilation. How can we foster this 'spirit of enquiry' in our pupils? There is no simple answer to this question for teachers convey an attitude to their subject in a variety of different ways. Moreover, we must bear in mind that with younger pupils it is essential for them to experience a sense of achievement in their practical work. This requirement may well conflict to some extent with the presentation of a genuine experimental situation which inevitably involves some degree of uncertainty. The following suggestions may provide a helpful starting point.

a. We suggest that whenever possible pupils should gain their initial understanding of a basic concept by being faced with a series of problems.

b. The next phase involves the formulation of a hypothesis - the point when curiosity or observation changes to constructive questioning.

c. Where possible, we suggest that deductions from experimental work should always include suggestions for a further stage in the enquiry, thus fostering the idea that one experiment paves the way for the next.

d. We sometimes forget that work done outside school time is just as much an integral part of a course as the teaching itself. Problems and test questions set in a spirit of enquiry can do much to maintain and enhance attitudes acquired in the laboratory.

e. One of the advantages of adopting a more enquiring approach involving a greater use of discussion, is that pupils tend to be forthcoming with ideas - both fruitful and unfruitful. Dealing with good ideas is generally a fairly easy matter; the bad ones sometimes present problems, particularly that of not discouraging the pupils who ask them. Adopting the attitude that every idea is a good one just because it is an idea seems to us to have much to commend it at the elementary school level.

The Value of Discussion

The value of discussion in conveying the spirit and methods of scientific enquiry has already been mentioned. But it can also serve other purposes. It can provide an excellent opportunity for consolidation and revision. It can also enable students to work out hypotheses for themselves through a mutual exchange of ideas under the guidance of the teacher. Perhaps the most essential prelude to a successful discussion is adequate preparation of the material to be discussed, both by the teacher and the pupils (perhaps in preparation). The teacher will need to have a broad idea of the path the

the discussion is likely to follow and to have formulated the sort of opening questions that are likely to set it off on the right tract. Teachers should take care however, lest too much advance preparation should cause a potentially fruitful discussion to develop into a 'set-piece' affair of limited educational value.

Class Practical Work and Demonstration

In this course a distinction has been drawn between demonstration by the teacher and the practical work carried out by the pupils. In class practical work the accent is either on using information, techniques, and concepts or working them out. It is essentially an investigatory or problem-solving activity.

A demonstration can also serve this purpose to some extent, particularly if the level of sophistication of the subject matter is relatively high. For instance, a demonstration by the teacher, aided by pupils' comments, may well give a better understanding of the controls in a particular experiment than if the pupils were left to their own devices.

In the main, however, demonstration is a method of imparting a piece of information, describing a concept or technique, or introducing a point for discussion, without the trial and error confusion that invariably plays a part in class work. A topic demonstrated may, or may not, be something the pupils could have investigated themselves.

The evidence available suggests that for conveying information and describing concepts and techniques, a demonstration is as efficient as, if not better than, class work. Furthermore it is much quicker and, if used judiciously, can gain time in the course for more class practical work.

There is a place in biology teaching for both demonstration and class work. They are complementary to each other.

Group Practical Work

For the majority of their classwork pupils will be working in small groups all performing the same investigation. But on occasions the work can be so arranged that each group is concerned with a particular different task; for instance when we wish to show that a particular concept applies to a whole range of organisms or when pupils are involved in a variety of different problems or investigations. The organization of such practical work differs little from normal routine, except that when the work is completed, it is important that the class as a whole should be made aware of the findings of the different groups. In addition, it is a good idea to depute a member of each group to give an account of their work. The results of each group investigation should be summarized on the board so that the whole class can make deductions from them.

Even when groups of pupils are all undertaking the same investigation it is wise to put a summary of the results on the board and to hold a discussion. In this way many important points, such as the purpose of controls, experimental error, and the making of hypotheses can be introduced. Class average results are far more significant than those obtained by single groups.

Long-term Investigations

Some of the investigations undertaken during this course last two or three weeks or even longer. They need not occupy the whole time, however, and the art of using them for teaching is to integrate them with other work. To obtain the best value from such exercises, students should feel that they are individually responsible for their investigations throughout the whole period of their existence. This necessitates an allowance of time during class period to make records and carry out any procedures needed to keep the experiments going. The natural tendency is to forget them once they have been set up, or to regard them as something of secondary importance, peripheral to the usual short-term class work. Here again, discussion will play an important part at the conclusion of the work so as to ensure that the main principles and implications of the investigation are not obscured by minor problems in experimental technique or other irrelevant difficulties.

Writing Up Practical Work

There are many different ways of writing-up practical work and all of them have their merits. It would be wrong to assert dogmatically that any one is the best. The following suggestions are intended to provide a rough guide which can be adapted to suit individual preferences.

a. When writing up an investigation, a pupil should aim to give in his own words a concise account of everything he did and why he did it. The use of distinct headings has much to commend it, particularly for juniors. These could be - problem, hypothesis, experimental methods, results, deductions, suggestions for further investigations.

b. Some experiments involve relatively complicated procedures. We find that pupils can benefit in their understanding if they are required to summarize the method in a brief statement or 'outline' - which may be only a few sentences long - before becoming involved in technical details which can obscure the overall pattern of procedure.

c. It is not always necessary to write up each piece of work separately and completely. Where appropriate, summaries of a group of related experiments can be written up together.

d. With reasonable guidance, pupils should become capable of writing up their practical work unaided. Dictated notes will seldom be needed except possibly to supplement the instructions for experimental procedure included in the text.

e. Pupils will find it helpful to cross-reference their own notebooks to the appropriate portions of the text, particularly where practical work is involved. Such a practice greatly simplifies the problems of revision.

f. The role of drawings and diagrams in biology can be greatly over-emphasized. We suggest that a drawing is only needed (1) to explain a point which cannot be adequately and concisely described in words, and (2) when a matter of structural detail either in an organism or a piece of apparatus needs careful exposition. In such instances a large, clear drawing can be a valuable aid to understanding. Small sketches and simple schematic diagrams should also be encouraged but only where they clarify a situation which is inadequately covered by a verbal description.

Teaching Elementary Fieldwork

a. Is field work really necessary?

We hear many statements these days attempting to justify the inclusion of fieldwork in an elementary course: that it promotes a love of nature; that it enables children to see and handle living things; that it develops powers of observation; that it satisfies an acquisitive instinct; and so forth. Such arguments surely overlook the main issue. Among the important general principals in biology are those concerning the behaviour of populations and the relationships of the plants and animals which compose them. The principles of spatial distribution, succession, competition, and food-chains, to mention just a few, are fundamental to our understanding of the subject at any level. Moreover, they are aspects which, in the last resort, can only be studied satisfactorily in the field. Either we must include them, and in so doing concede the importance of fieldwork; or we must disregard them altogether. There seem to us to be no half measures; and for this reason, we have adopted the first policy unreservedly.

IMPLEMENTATION

To implement the Nuffield Biology Program into a reasonable well integrated one semester beginning biology course commencing on January 27, 1970, required a change in the volume and chapter sequencing with some deletions in order to place the ecological unit during the last month of the spring semester. Further implementation was necessary which will result in a complete deviation from the normal college schedule of having a separate lecture - laboratory - discussion meetings throughout the week. The class schedule as now planned will be on a everyday basis for 50 minutes. That is, five fifty minute class periods a week similar to a typical high school daily schedule. This will afford us the opportunity to present a completely integrated laboratory - lecture - discussion biology course where the emphasis is upon discovery and investigation in the laboratory and the immediate follow up, an inquiry discussion session based on the laboratory findings. In this manner, the biology course becomes a truly laboratory centered program with pre and post laboratory discussions used to initiate the need for having the investigation and the follow up session so vital to interpretation and understanding the important biological concepts.

SEMESTER COURSE SEQUENCE BY CHAPTER TOPICS AND MAJOR BIOLOGICAL THEMES

The Perpetuation of Life

Similarities and Differences in Living Things
How do Similarities and Differences Come About?
The Material of Inheritance
The Origin of New Characteristics
How do Genes Work?
Development
Patterns of Development
Problems of Development
Different Ways of Breeding
Genes in Population
The Selection of a New Generation
Evolution

BIOLOGICAL SCIENCE COURSE PROPOSAL
Gerald Bothner
Ronald K. Gibbs

The Maintenance of Life

- Breathing: An Exchange of Gases
- How Breathing Takes Place
- Respiration: How is Energy Obtained?
- Food and Life
- How Animals Feed
- Problems of Digestion
- Plants and the Atmosphere
- Plants and Light Energy
- The Organism and Water

Living Things in Action

- Cells and Water
- The Control of Water Content
- Substances in Solution
- Transport Systems in Animals
- Mass-flow Systems in Plants
- Organisms Behave
- Structures which Do Things
- Detecting Changes in the Environment
- Linking Systems
- Adjustment
- An Important 'Adjustment' Organ - the Kidney

Living Things in Relationship to Their Environment

- Becoming Established in a Habitat
- Community and Succession
- A Community in the Soil
- Behaviour and Survival
- Climax and Feeding
- How Some Living Organisms Provide Habitats for Others
- How Man May Affect his Surroundings
- Wisconsin Field Studies
    - Vascular Plants in the Spring
    - Aquatic Communities in the Spring
    - Prairie Communities in the Spring
    - Deciduous Forest (Oak-Hickory)
    - Deciduous Forest (Maple-Basswood)

BIOLOGICAL SCIENCE COURSE PROPOSAL
Gerald Bothner
Ronald K. Gibbs

WEEKLY COURSE SCHEDULE WITH INTEGRATED LABORATORY AND DISCUSSION SESSIONS

Week 1:

Day	Topics (Lab experiments in parentheses) (text paragraphs in parentheses)
1	Introduction to biological science; Classification (1.1); (blood grouping) (1.2).
2	(fingerprinting) (1.3); Racial conflict (1.4); Where living things come from (2.1) (worm experiment).
3	Inheritance of characteristics (2.2-2.3) (fruit fly laboratory).
4	Using models (2.4) (beads); Other organisms (2.5); Background reading: Spontaneous generation.
5	Life begins (3.1) (locust laboratory); (use of microscopes) (3.2).

Week 2:

1	Inheritance models (3.3); Is seeing believing?; War against malaria (4.1).
2	Detecting new characteristics (4.2) (yeast experiments -Learning antiseptic techniques).
3	Mutation (4.3) and Chromosomes (4.4); Interesting cases of mutation; Chromosomes produce characteristics? (5.1).
4	Genes (5.2); Yeast (5.3); Genes (5.4); Background readings; Mutation and radiation.
5	Nucleus and cytoplasm (6.1); Inheritance and environment (6.2) (seed experiment); Hormones (6.3-6.4); Inside a cell.

Week 3:

1	Patterns of development (7.1); Cleavage (7.2); Cell development (7.3) (starfish embryo).
2	Variation (7.4-7.5); Unofficial life (Film).

BIOLOGICAL SCIENCE COURSE PROPOSAL

Gerald Bothner
Ronald K. Gibbs

Day	Topics (Lab experiments in parentheses) (text paragraphs in parentheses)
3	Problems of development; Cell Division (8.1); All interaction (8.2); Development control (8.3); Background reading: Carrots, coconuts, and cancer.
4	Role of fertilization (9.1); Different ways of breeding (9.2); Fertilization (9.3); Background reading: Courtship behaviour and parental love.
5	Population genetics (10.1) (beads); Mathematical model (10.2); Hardy-Weinberg (10.3) (PTC, tongue rolling, and eye colour.
Week 4:	
1	Medical genetics; Selection (11.1) (fruit fly chamber experiment); Ecology genetics (11.2) (11.3) (11.6).
2	Artificial selection; Evolution (Chapter 12).
3	Evolution (Chapter 12).
4	HOUR EXAM I.
5	Exam Discussion.
Week 5:	
1-2	Breathing and burning (1.1); (using limewater) (1.21); (using bicarbonate) (1.22); (do living things produce carbon dioxide?) (1.3); (human gas exchange) (1.4); (effects on exercise) (1.5); Physical education and gas exchange (1.6); Background reading; Oxygen and Mount Everest.
3	Route of inhaled air (2.2); Lung Ventilation (2.3); (demonstration - Syringe Model) (2.33); Structure of lungs @2.4); Background reading: Smoking and health.
4	Introduction to Respiration (3.1); Fuels in the body (3.2); Energy and its release (3.3); how hot is the human body) (3.32); (mechanical energy)(3.35).
5	Energy without oxygen? (3.4); (Experiments on yeast) (3.51); Respiration (3.6); Background reading: Respiration and Athletics.

Day	Topics (Lab experiments in parentheses) (text paragraphs in parentheses)
Week 6:	
1	(test for carbohydrates) (4.21); (test for fats) (4.22); (test for proteins) $4.23): (test for vitamins) (4.24); Minerals (4.25).
2	Why is food necessary (4.1); Kinds of food (4.2); Balanced diet (4.3); World food supply (4.31); Eating the right kinds of food (4.32); Food chains and webs (4.4); Background reading; World food problem.
3	Feeding devices in mammals (5.1); Teeth (5.11); The cat (5.12); The Sheep (5.13); (feeding in the locust) (5.21).
4	(feeding in the housefly) (5.23); (additonal feeding experiments using various glucose solutions); (house flies and man) (5.25).
5	Background reading: Keeping our teeth.
Week 7:	
1	Body plans (6.1); (gut wall barrier) (6.2); Kinds of membranes (6.3); (chemical changes) (6.4).
2	Enzymes as catalysts (6.5); (saliva in gut model) (6.6); Need for digestion (6.7); (large molecules from small) (6.8).
3	Human digestive system (6.9); Background reading: Digestion in non-humans.
4	Plants and carbon dioxide (7.1); (testing the hypothesis) (7.11); Carbon dioxide exchange (7.12); Proof of carbon dioxide (7.13); Plants, animals and carbon dioxide (7.14).
5	Plants and carbon dioxide (7.2); (analyzing gas produced by water plants) (7.21).
Week 8:	
1	Historical evidence (7.22); Background reading: Plants and gases in water.

BIOLOGICAL SCIENCE COURSE PROPOSAL
Gerald Bothner
Ronald K. Gibbs

Day	Topic (Lab experiments in parentheses) (text paragraphs in parentheses)
2	Green plants and food webs (8.1); Van Helmont's experiment (8.11); (testing leaves for starch) (8.21); (starch from sugars) (8.22); Structure of green leaves (8.3); (surface of leaves) (8.31); (leaf skeletonizing) (8.32).
3	(formation of sugars by green leaves) (8.4); Tracing carbon atoms (8.5); Carbon dioxide and carbohydrates (8.6); (leaves and light) (8.7); Where does photosynthesis take place (8.72); Leaf structure and photosynthesis (8.73); Photosynthesis and respiration (8.8); Plants and food web (8.9); Background reading: Carbon dioxide fro glasshouse for crops.
4	(water and the land plant) (9.3); (investigations on a Leafy shoot) (9.32).
5	Properties of water (9.2); Water and the atmosphere (9.31); More about the stoma (9.33); Methods of gaining water (9.4); Water loss (9.6); Background reading: Your body and water.
Week 9:	
1	Transport systems (7.1-7.2) (blood circulation); (blood cells) (7.3).
2	Circulation (7.4-7.5); Heart (7.6); Vessels (7.7-7.8); Sheep hearts.
3	Blood function (7.9); Background reading: New blood for old, The Rhesus Factor; Blood and Race; Plant Systems (i.1-8.2).
4	Behaviour (Chapter 9) (laboratory experiment?)
5	Effectors (Chapter 10) (muscle experiment).
Week 10:	
1	Receptors (11.1-11.2-11.3) (receptor laboratory?)
2	Balance (11.4); Plants and gravity (11.5); Background reading: Seeing clearly, Eyes that cannot see clearly, Pinhole vision; Integration (12.1), Nervous system (12.2).
3	Insulin (12.3); Plants hormones (12.4); Background reading: Hormones, human populations; Adjustment (13.1-13.2); Steady states (13.3).

Day	Topics (Lab experiments in parentheses) (text paragraphs in parentheses)
4	Work of Kidney (FILM); Discussion of Chapter 14.
5	Behaviour and Survival (Chapter 15).
Week 11:	
1	HOUR EXAM II.
2	Exam Discussion.
3	Habitat (1.1-1.2-1.3) (blowfly experiment); (1.4-1.5).
4	Human reproductive rate (1.6); Background reading: A powerful beetle; Succession (2.1-2.2-2.3-2.4); Background reading: Drama in an aquarium.
5	Soil communities (3.1-2.3-3.3) (soil profile experiment); (Tullgren apparatus experiment) (3.4-3.5-3.6-3.7-3.8-3.9); Background reading: Home-made soil.
Week 12:	
1	Succession (16.1) (16.2 but adapt to United States) (16.3); Food chains (16.4); Background reading: The loudest noise on earth.
2	Symbiosis - Epiphytes (17.1); parasites (17.2) (frog parasites) (17.3-17.4-17.5-17.6); Background reading: The Golden bough.
3	Pollution (18.1-18.2) (air pollution experiment).
4	(urban ecology).
5	Pesticides (18.3); Organisms which flourish under man's influence (18.4); Conservation (18.5); Background reading: 'What fools they were in those days'.
Week 13:	
1	Field Trip techniques - plants.
2	Field Trip techniques - animals.

Day	Topics (Lab experiment in parentheses) (text paragraphs in parentheses)
3	Field Trip I - Vertebrates (emphasis on birds).
4	" " "
5	" " "
Week 14:	
1	Field Trip II - Vascular Plants (emphasis on spring wild flowers).
2	" " "
3	Field Study I - Aquatic Communities
4	" " "
5	Field Study II - Prairie Communities
Week 15:	
1	" " "
2	Field Study IIIa - Deciduous Forest (Oak-Hickory Association).
3	" " "
4	Field Study IIIb - Deciduous Forest (Maple-Basswood Association)
5	" " "
Week 16:	
1	Field Trip report work
2	" "
3	" "
Week 17:	
	FINAL EXAMINATION

Appendix F

RESEARCH PROJECT TEACHERS FOR THE DISADVANTAGED EXPERIMENTAL TEACHER EDUCATION MODEL

EARTH SCIENCE
PROPOSAL

BY

BRIAN K. MCKNIGHT
WSU-O GEOLOGY DEPARTMENT

AND

ROBERT PICKERING
WSU-O SCIENCE EDUCATION
SCHOOL OF EDUCATION

AND

FRANZ SEMMELMANN
WSU-O GEOGRAPHY DEPARTMENT

AUGUST, 1969

Appendix F

RECOMMENDATIONS FOR THE TRAINING OF PROSPECTIVE ELEMENTARY TEACHERS IN THE AREA OF EARTH SCIENCE

The development of a course in earth science, for elementary teachers, must necessarily be effected through the use of carefully selected guidelines. After considerable research and deliberation we have adopted the following guidelines:

1. Attention must be directed toward two aspects of the science program - the dimension of knowledge or content, and the dimension of performance or process.

    a. Instruction in earth science should be conducted in such a way that prospective elementary teachers will develop an understanding of processes and scientific inquiry.

    b. The program for earth science preparation of the prospective elementary teachers should include a breadth of preparation most appropriate for the elementary school program.

    c. To be effective, each dimension must become the Vehicle for the development of the other.

2. The program for earth science preparation of the prospective elementary teacher should develop an appreciation of the esthetic aspects of the field through individual experiences and discoveries.

3. The program for earth science preparation of the prospective elementary teacher should include techniques applicable to the teaching of earth science concepts in the elementary school.

4. The program for earth science preparation of the prospective elementary teacher should take into account the concepts and methods employed in recent curricular developments.

5. The program for the earth science preparation of the prospective elementary teacher should be based on recommendations made by the various agencies concerned with teacher certification.

Following the development of the preceding guidelines, a literature search was conducted. Materials were reviewed for the purpose of determining the content and techniques most appropriate to the training of the prospective elementary teacher in the area of earth science.

Sources reviewed include:

1. Earth Science Curriculum Project (ESCP) textbook and teachers guide

2. Earth Science Sourcebook

3. American Association for the Advancement of Science (AAAS) publications

4. Recent elementary education textbooks

5. High school earth science and general science textbooks

6. College earth science and geology textbooks

Using the above guidelines, a one semester, four credit course in earth science for prospective elementary teachers is proposed.

1. SCHEDULE

   a. Three one hour lectures per week.
   b. One three hour laboratory period per week.
   c. One full day field trip.

2. LECTURE

   a. The lecture will provide the content background necessary for a general understanding of the subject matter and for the laboratory investigations.

   b. The lecture is arranged so students will start with more familiar subjects (rocks, maps, landforms) and progress to subjects of a more abstract nature (interior of the earth, diastrophism, the universe).

   c. When studying landforms, the features seen today will be studied first. Then we will "discover" what processes were most likely responsible for their formation. This will provide a better insight into how scientific discovery was developed, although it is just the opposite approach that most texts take. (Most earth science texts study the process in detail, then show how it affects the land's surface.)

   d. Audio visual materials will be employed to as great an extent as possible.

   e. Because most students will become teachers in this state, Wisconsin geology will be emphasized.

3. LABORATORY

a. The laboratory should develop the skills of scientific inquiry. This includes the powers of observation, concise reporting of results, carrying out experiments, documenting ideas with evidence, organizing and interpreting data, and critically reviewing the literature.

b. The laboratory exercises for this course are arranged so that the student starts with the familiar and progresses to the less familiar.

c. Most all equipment and techniques employed in the laboratory will be available to the student when teaching in the elementary schools later.

d. Where possible, metropolitan areas will be chosen in the laboratory as examples to study.

4. FIELD TRIPS

a. Field trips can be one of the most effective methods of helping students understand earth science. It is also one of the best methods to get elementary children interested in their natural surroundings. Therefore, it is believed that the more field experience the elementary teacher has, the greater the benefit to the students.

b. Field trips scheduled during laboratory hours will be taken to areas around Oshkosh. The full-day field trip will be to well-known geologically interesting areas such as Baraboo, Wisconsin, or the Kettle Moraine State Park.

5. TEXTBOOK

a. The choice of a text is best left up to the lecturer. It is felt here that the text should:

(1) be a non-methematical introduction to earth science,

(2) show some historical importance to development of earth science ideas,

(3) show how a scientist approaches a problem,

(4) emphasize both the state of progress in earth science knowledge and also the many controversies and unsolved problems, and

(5) show what directions earth science research will take in the future.

b. Texts that might be chosen include:

(1) "Geology/A Survey of Earth Science" by Edgar Winston Spencer

(2) "Earth Science" by Richard J. Ordway

(3) "Earth Science" by Lounsbury and Ogden

c. Additional readings from reference books and Scientific American Offprints would be helpful for an increased appreciation of earth science. These will be placed on reserve for the students' use.

EARTH SCIENCE LECTURE SCHEDULE - Mr. McKnight

1. Introduction: The nature and scope of earth science
2. Introduction: The importance of earth science in environmental studies
3. Introduction: How the earth scientist obtains new information; how knowledge is ever expanding in the earth sciences
4. The Rock Cycle
5. Rocks
6. Minerals

7. The Structure or Architecture of Layered Rocks
8. The Structure or Architecture of Layered Rocks
9. The Concept of Geologic Time

10. Geologic Maps
11. EXAMINATION 1
12. The Processes of Physical and Chemical Weathering

13. Soil Types and their Formation
14. The Hydraulic Cycle
15. The Work of Streams

16. The Work of Streams
17. The Nature and Importance of Groundwater
18. The Formation and Movement of Glacial Ice

19. Valley Glaciers: Movement and Resulting Landforms
20. Continental Glaciers: Movement and Resulting Landforms
21. The Glacial History of North America

22. Work of the Wind
23. EXAMINATION 2
24. Gravity and Isostacy: What they tell us about the interior of the earth.

25. Earthquakes
26. Volcanism
27. Volcanism

28. Plutonism
29. Diastrophism
30. Metamorphism

31. EXAMINATION 3
32. Nature and Origin of Ocean Water
33. Physiography of the Ocean Floor

34. Processes Responsible for Physiographic Features

35. Sedimentation in the Ocean: Sediment Distribution
36. Sedimentation in the Ocean's: Physical and Biological Processes

37. Oceans Potential as Source of Food and Raw Materials
38. Solar Radiation and the Heat Budget
39. Nature and Composition of the Earth's Atmosphere

40. Movement of Air
41. Climate
42. Historical Development of Man's Views of the Universe

43. Lunar Studies
44. The Solar System
45. The Solar System

46. Stellar Evolution and Galaxies
47. The Universe and Its Origin
48. Contributions and Goals of the Space Program

FINAL EXAMINATION

EARTH SCIENCE LABORATORY SCHEDULE - Mr. McKnight

1. Rock & Mineral Study: Observe and describe the components of very coarse-grained igneous rocks. Make classification of common rock-forming minerals based on students' observations.
2. Rock & Mineral Study: Important accessory minerals and crystal growing.
3. Rock & Mineral Study: Sedimentary and Metamorphic Rocks.
4. Structural Exercises: Strike and dip; structural arrangement of layered rock bodies.
5. Contours and Topographic Maps
6. Geologic Maps
7. Structures of the Earth as observed on Topographic and Geologic Maps (based on background of last three exercises).
8. Field Trip
9. Running Water: Landforms resulting from, pollution of; attempts at altering or controlling course of rivers and streams, etc.
10. Groundwater: Movement of underground water, filtering, contamination, and other factors affecting its use as a natural resource.
11. Features Resulting from Glaciers and Wind Action
12. How Internal Forces Control Physiographic Patterns: Landscapes influenced by Volcanism, Plutonism, Metamorphism, and Diastrophism.
13. Fossils: Age and Environment Indicators.
14. Size, Mass, and Distance Measurements of Astronomical Bodies.
15. Visit to the Planetarium.

The new course in earth science was developed with the following considerations:

1. The student will become aware of the processes acting upon the earth, both internally and externally, and aware of our present concepts as to why and how these processes occur.

2. The interrelationship between earth science and the other disciplines be stressed.

3. The student develops an understanding of scientific inquiry.

4. The experience of individual observation and discovery be employed whenever possible.

5. Terminology should be kept at a minimum.

6. The subject matter be made as appropriate as possible for the prospective elementary teacher.

7. The techniques be applicable to teaching earth science ideas at the elementary level.

8. Special emphasis be made, whenever applicable, to earth science as related to metropolitan areas.

Appendix G

RESEARCH PROJECT TEACHERS FOR THE DISADVANTAGED EXPERIMENTAL TEACHER EDUCATION MODEL

PHYSICAL SCIENCE COURSE

By

DANIEL GOLDTHWAITE

DEPARTMENT OF PHYSICS AND ASTRONOMY

SEPTEMBER 1969

INTRODUCTION

After teaching 80-101 for two semesters and one summer term, Dr. Goldthwaite has made several revisions in the course. A major revision has been made in the organization of the laboratory program of the course. This fall, for the first time, it will be possible to coordinate the laboratory and lecture sections of the course. In the past, half of the students were doing physics labs while the other half were in chemistry labs. Now for the first time all sections will be doing the same laboratory work during the same week.

A new text was adopted. The choice of a text was made after the students of the class had examined and evaluated several different physical science texts.

Following is the description of the course: a summary of the objectives, the text, and proposed subject matter and experiments.

Physical Science 80-101 - Selected topics from physics and chemistry. Forces, conservation of energy and momentum, atomic and nuclear structure, electro-chemistry. The laboratory provides opportunity to gain personal insight into physical concepts, relationships and principles, as well as their limitation, and to develop skill in the appropriate use of physical apparatus. The course is designed particularly for students preparing for elementary school teaching.

Course Objectives:

1. The course will cover, as completely as possible, the basic physical science concepts that the students must understand to effectively teach elementary school science.

2. The laboratory work is designed to develop the competency of the students to the level where they can effectively guide an elementary school science laboratory program.

3. The relationships between physical sciences and other areas of science and mathematics will be developed as fully as possible.

4. When possible a relationship between the science concepts of the course and the personal experiences of the students will be developed.

5. An important objective of the course will be to raise each students level of scientific literacy as high as possible.

COURSE SCHEDULE

Physical Science 80-101 is a four credit course. Each week there are two one-hour laboratory sessions and a one-hour problem hour -

in addition to a one-hour lecture.

There are approximately 150-160 students in the lecture sessions. Each laboratory and problem hour section is limited to twenty students. The lectures are supplemented with demonstrations, films, and occasionally large group discussions, usually on a current event related to science. The problem hours are devoted to discussion of assigned problems or student questions raised during the session.

TOPIC OUTLINE

1. Mathematics review
2. Motion
3. Force and Motion
4. Gravitation
5. Energy and Momentum
6. Heat
7. Solids, liquids and gases
8. Atomic structure
9. Theory of the Atom
10. Chemical bonding
11. Quantitative chemistry
12. Ions and solutions
13. Acids, bases and salts
14. Chemical reactions

Approximately a week will be devoted to each of these topics. This will be the first time the revised course is taught; therefore minor changes will undoubtedly be made.

LABORATORY PROBLEMS

1. Measurement: linear measurement, volume and density
2. Motion: velocity and acceleration
3. Spring constant: mass, force, simple harmonic motion, and graphing
4. Inference board: observation and inference
5. Pendulum: simple harmonic motion, controlling variables, and graphing
6. Change of state: specific heat, heat of fusion and graphing
7. Chromatography: simple applications used in elementary school science programs.
8. Density: solids, liquids, and gases
9. Molecules: models of common molecules
10. Flame tests: characteristic spectrum of common ions

11. Specific heat and atomic weight
12. Molecules: measure diameter of oleic acid
13. Distillation of wood
14. Molecular weight

These laboratory problems have been designed to supplement the topics covered in the lecture and problem hour session. Minor revisions will probably be made between the first and second semesters.

Appendix H

GENERAL PSYCHOLOGY 86 301 SS69 REPORT

BRUCE BERNARD BLACK, PH.D

TEXT

The text, Floyd Ruch's Psychology and Life, and the workbook to accompany it, were made available on a purchase plan. Because of previous use, the WSU-O Textbook Library was able to sell withdrawn copies at a much reduced fifty cents apiece. The workbooks were obtained directly from the publisher, Scott Foresman, at a reduced rate in spite of their scarcity. Students profited further by having their own personal copies of each during the summer session. Assignments were made at a normal pace for summer terms.

AUDIO-VISUAL AIDS

During the "off time" two video tapes were prepared: one dealing with problems that any student in general psychology would face, the second with special problems of the freshman facing the universities' regulation about earning passing grades during the summer in order to continue in school, if their initial scores on entrance exams and percentile position from high school were below a cut-off. Project students participated in preparation of both tapes, and were "on-camera" for the second.

Tapes were viewed individually and in groups. The initial cost of producing them was off-set by the economy in being able to spend individual appointment time on problems immediately related to course material assigned. Both tapes were general, and applied to many in the class. Positive comments were made about both by viewers, while no negative reactions were recorded. (Others on the Project staff may add their observations about the tapes.)

In addition an audio tape was prepared for use by seminars in note-taking. The topic was a lecture on the functions and evoluation of the brain.

LIBRARY WORK

During the session, as during any term previously, an assignment was made to prepare an abstract of a chapter in the Annual Review of Psychology (on reserve) and of an original research report referenced in that volume from one of the many journals in the open stacks of the library. The results from this assignment were mainly positive and served as a diagnostic instrument for writing behavior. Students with writing problems were quickly singled out for extra work. The assignment also served as a stimulus for seminar sessions on abstract writing and class work in English Composition.

Some students do not adjust rapidly to multiple choice tests. For this reason, and to stimulate reading and writing, extra credit was given for additional abstracts prepared according to the earlier assignment, and more extra credit was offered for reviews and critiques of whole books. Response to this opportunity might be used as a parometer of motivation or interest in reading and writing. Some students were partially prevented from performing up to their potential by work assignments, but this was not a serious problem except to those who chose to make it so. The individual who prepared twenty-two abstracts (most of which had to be done in the library during the daylight hours) was carrying a full load and working thirty-five hours a week off campus on a bakery distribution route. She was a non-project, but she was highly motivated.

Not all comments about the library work were positive. Many students resented the possibility that a student who might not do well on tests could still earn a great deal of credit by doing extra reading and writing. Other students felt that the assignment of an abstract was not worthwhile in the first place, and that the additional extra-credit abstracts and critical book reports were also required and not worthwhile. However, a great deal of extra reading was stimulated, and the proper American Psychological Association Publication Manual format was learned by all in the class.

COMMITMENT

A number of indices might be used to measure motivation and interest in the class. Several conditions intervened beyond normal class situations. Most important in the view of the instructors was the scheduling of the class at seven a.m. each of the five weekdays. The strain which this introduced was very noticable, both in the lack of response and many occasions to "standard punch lines" which had been used on other occasions, and in the attendance records of all but the most hardy. A second intervening variable which must be considered was the selection procedure which allowed qualifying freshmen to take the course. Under usual circumstances the personnel in the class would not include freshmen, except in a few rare cases when the selection is by percentile of high school class: some elementary education freshmen were allowed in this sophomore class if they are high ranking students. It must be remembered for evaluation purposes that the input for this class were low ranking students.

One index already mentioned was the amount of extra credit work submitted. A normal range from none to twenty-two abstracts was received. Another index was attendance. This ranged from nearperfect to very poor. Quizzes given at the beginning of the period caught late-comers, and quizzes given at the end of the period caught absentees. These devices to stimulate attendance still did not reach the least motivated.

One stimulus which did attract some participation from even the most reluctant was the tutorial review session just prior to tests. Other than attendance, however, no observable differences between the participants and the non-participants was evident.

A high level of commitment to each other was shown as the class resisted several opportunities "to earn extra credit by turning in classmates for cheating and by confessing to cheating themselves" which were offered in conjunction with a lesson on brainwashing. Following the description of persuasive dialogue, and of psychological coercion such as brainwashing by several hours, the offer to give credit to "policemen" volunteering information about cheaters was made. No student took the opportunity to inform, during any of the remaining two quizzes or the final exam.

DISADVANTAGED

Emphasis during the term on individual differences was capped during the final week with a workshop experience in prejudice. Dominant brown-eyed, recessive blue-eyed were segregatedand asked to establish a three-hundred year tradition of such a prejudice. Later exercises in reducing the tension and eventually the discrimination were introduced. The majority of the class (blue-eyed) found themselves in a minority group for the first time. Overt "racism" came comfortably to the brown-eyed. Breaking down the barriers proved difficult. Once "apartheid" was accepted it became a humorous but very real concept. (Incident: when the blue eyed persons, sitting in the darkened half of the room to save electricity", did poorer on a visual inspection task, one of the blue-eyed members actually interpreted the results as meaning "that maybe the brown-eyed students are smarter than we are!" Without any prompting whatsoever.)

COURSE DESCRIPTION

For this instructor's half of Experimental General Psychology, an attempt was consciously made to maintain the content of a typical first survey course in the area. In keeping with the course description published in the University catalog "A beginning course in psychology designed to provide an understanding of the modern approach to human behavior and to lay the foundation for additional work in psychology;" much of the reading and factual lecture material was quite similar to the ordinary semester's work. In meeting the research design and requirements of the Research Project - Teachers for the Disadvantaged proposed course in Experimental General Psychology several innovations and a great deal of extra time was spent with students. Much of the text and test source was identical with the ordinary course. Flexibility was designed to provide extra credit about that earned on multiple choice achievement evaluation instruments (which, it is observed, have been associated with academic traumas often in the Project student's past). A student who pursued individual intellectual or emotional goals through discussion, research-publication abstracts (from the Annual review of psychology plus an original journal article) or book reviews was rewarded. Reinforcement counted toward the final evaluation. An "open-door" encouragement for projects of nearly any type within the scope of human behavior hopefully began the elementary student on the way to becoming a behavioral artist, if not a behavioral scientist.

Topics covered, as during a regular semester for an ordinary general psychology class included:

Psychology: as an art and science
Methods of studying behavior
Human development: behavior maturation
Environmental influences on physiology across time
Input processes: getting to know all about You
Sensory functions, attention and perception
Behavior changes: learning and deciding
Thinking, remembering, and criteria
Workshop on a 3-man 30 day space mission (coincided with Apollo 11)
Motivation and emotions: the crux of behavior
Learn all you can about you (the new morality)
Measurement and prediction of behavior
I.O, ACT, SAT, GRE, and real abilities
Commitment laws for you and your friends
Hypnosis, hallucinations, and the unconscious
Getting along with self and others
Personality, reactions to stress, therapy
Social behavior, communications, persuasion
Workshop on brainwashing
Divorce, Prejudice, Insanity, and other disasters
Workshop on re-writing marriage and divorce laws
Workshop on prejudice: the Brown-eyed vs. the Blue-eyed

Quizzes were set up to coincide with work-book and text assignments. Student-led experiments were encouraged, using the class as subjects. Review and critique sessions were held before and after quizzes and exams. Three major examinations were given and will be discussed in the "criteria" section of this report. The section taught by this instructor accomplished the major goals without deletion: to study with care the entire text, to establish criteria of learning, to develop abstracting and writing skills, to utilize the workbook and video and audio tapes as study aids, to organize and schedule discussion groups and review meetings at the students' request, and to assist as many students as possible with individual needs in either learning skills or the specific areas of psychology by the course.

CRITERIA

Three major examinations were given. Each examination had been used with a previous class, in each case with an "n" of over 200. The comparisons for the first and second examination will give some idea of the relative abilities in learning about general psychology and responding to these specific test items as presented in Figures 1 and 2. Figure 1 indicates that the Project students fell within the normal range for general psychology students, but that their distribution centered lower than a typical class. Factors affecting these scores which must be considered included: the Project class met at 7 a.m. rather than at 1:30 p.m.; over half of the Project class was composed of freshmen, while very few freshmen were allowed in the other class; many of the Project freshmen were "qualifiers", deliberately selected because of poor academic standing; none of the regular class was a "qualifier"; assignments were given during two and one half weeks rather than six weeks; class met five times a week rather than three times a week, and for sixty rather than fifty minutes; the tests, items, readings, assignments, lectures were as nearly the same as a regular semester's as possible. The instructor is suggesting that extraneous sources of variability, as well as some very relevant ones (such as the "negative selection of students") influenced the criterion results for the Project class.

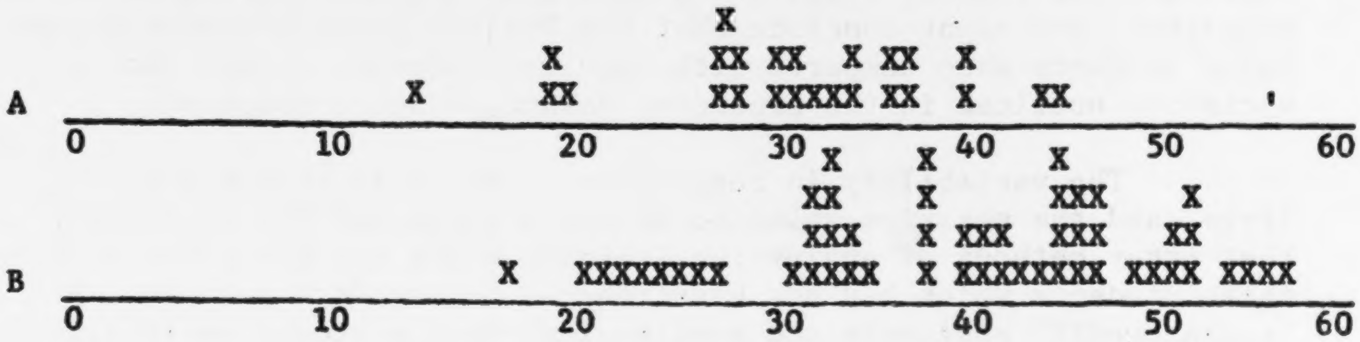

Figure 1 - A. First examination, E1F8B3, distribution for Project students Summer Session, 1969. Test was 70 items covering Ruch, 6th. Edition, Chapters 1, 2, 3, 4, 5, 6, 7, 8, and Reference I and II. Assignments were given during 2 1/2 weeks. (n=25)

B. First examination, E1F8B3, distribution for typical class in 86-301 during Fall term, 1968-69. Examination and assignments matched those given to the Project students. Very few, high academic-standing, freshmen were allowed in this section. Assignments were given during six weeks. (n=53 in the figure; these students were randomly selected from 232 total in the class to illustrate typical performance on the exam).

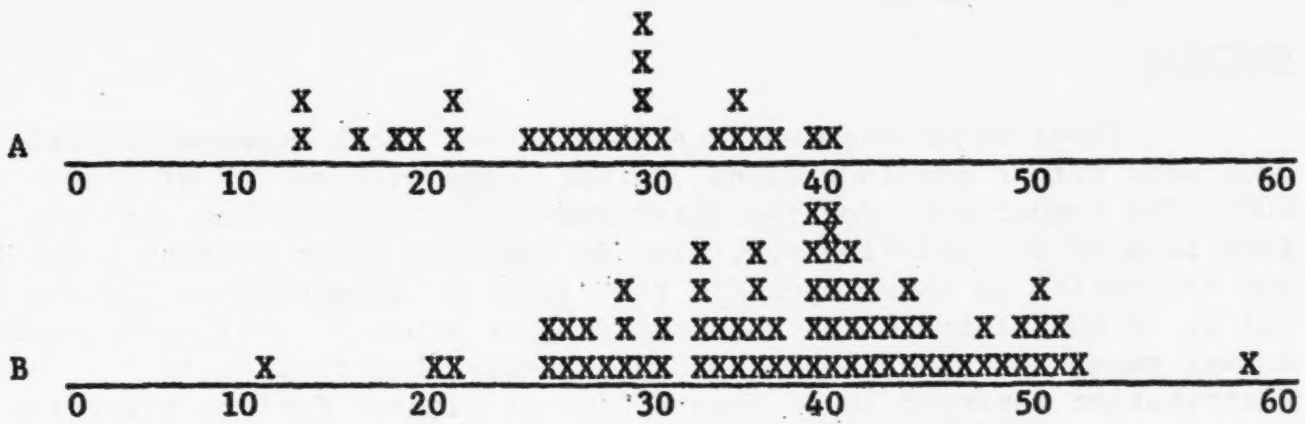

Figure 2 - A. Second Examination, E2F8B3, distribution for Project students, Summer Session, 1969. Test was 70 items covering Ruch, 6th. Edition, Chapters 10, 11, 12, 13, 14, Reference II and III. (n=25).

B. Second examination, E2F8B3, distribution for general psychology class during Fall term, 1968-69. Figure 2B presents randomly selected students for the class illustrating range and distribution. (n=71)

Figure 2 presents the comparason histograms for the Project class and the regular class which took the same test during an earlier semester. One might conclude that the Project group included B- and below students when compared with regular students, unless the variables outlined in the preceding paragraph are considered.

The variability in responding to multiple choice test items, and the negative selected students suggested the hypothesis that other methods of evaluating learning might tap resources within these students which had not been reached by standard methods. The "extra credit" abstracts and book reviews were proposed as an alternative for those students who were motivated to prepare them. The instructor observed that many Project students took advantage of the opportunity to learn in this less structured situation, and to improve their writing skills. Several of the Project "qualifier" freshmen who did well on tests far exceeded normal reading demonstrated by seniors during an ordinary term. More typical were the Project students who prepared several abstracts and/or a book review, and who commented that their attitude toward outside reading had changed to a positive viewpoint, or that they had overcome their reluctance to read, and had learned to review and abstract during the summer. Several of the least motivated students, including Project "qualifier" freshmen in at least two instances, resisted all attempts to enlist their interest and did not complete abstracts, reviews of books, or other extra credit, and did not do well on tests either. In these very few cases, lack of interest was indicated by low attendance, sleeping during class, failure to keep appointments (in some instances appointments made at 8 a.m. for a meeting at 11 a.m.), and failure to comply with assignments.

The rapport with the class was felt to be good by the instructor. Unannounced quizzes at the beginning or end of class periods normally were not given make-ups, but in nearly all cases during the summer, make-ups were allowed except in flagrant situations. The unannounced quiz maintained its motivating value for the students who demonstrated interest in other ways. For the unmotivated, they presented another opportunity to not demonstrate interest. Unmotivated students failed to request or take make-up quizzes for those missed during regular classes. Motivated students asked for and took make-ups. Therefore, in addition to giving a measure of learning and a source of daily attendance motivation, the un-announced quizzes given to the Project class developed as a descriminator between those motivated enough to attend class daily and/or request make-up work for days missed, and those who missed classes and did not care enough to make up the work missed.

Figure 3 presents final evaluation distributions for the final examination covering the last chapters in the text and readings, the final accumulated point distribution for this instructor's section of Project students, and a histogram showing the distribution of letter grades for the two sections of experimental general psychology. These distribution illustrate several important points. First, the distribution for the final examination is quite similar to the distribution for the first two exams. Several students far out-stripped their earlier performance, however, and achieved much higher positions and scores out of the possible 70 points. The second point focusses on the utility and value of the extra credit readings and papers. Project and abstract credit earned beyond the multiple choice quiz and exams credit weighed very heavily in the final cumulative distribution. The total work evidenced by the exceptional students with totals over 300 exceeded typical eighteen week semester work by superior students.

The final point of emphasis illustrated by the distribution of letter grades might be interpreted as showing that the two instructors for project psychology classes, although they had different objectives and utilized different stimuli in promoting

promoting motivation with their classes, gave the students about as fair and equivalent grade distribution as one might expect. Regardless of different lectures, exams, projects, etc., the distribution of letter grades for the two sections was independently quite alike. (See Figure 3C).

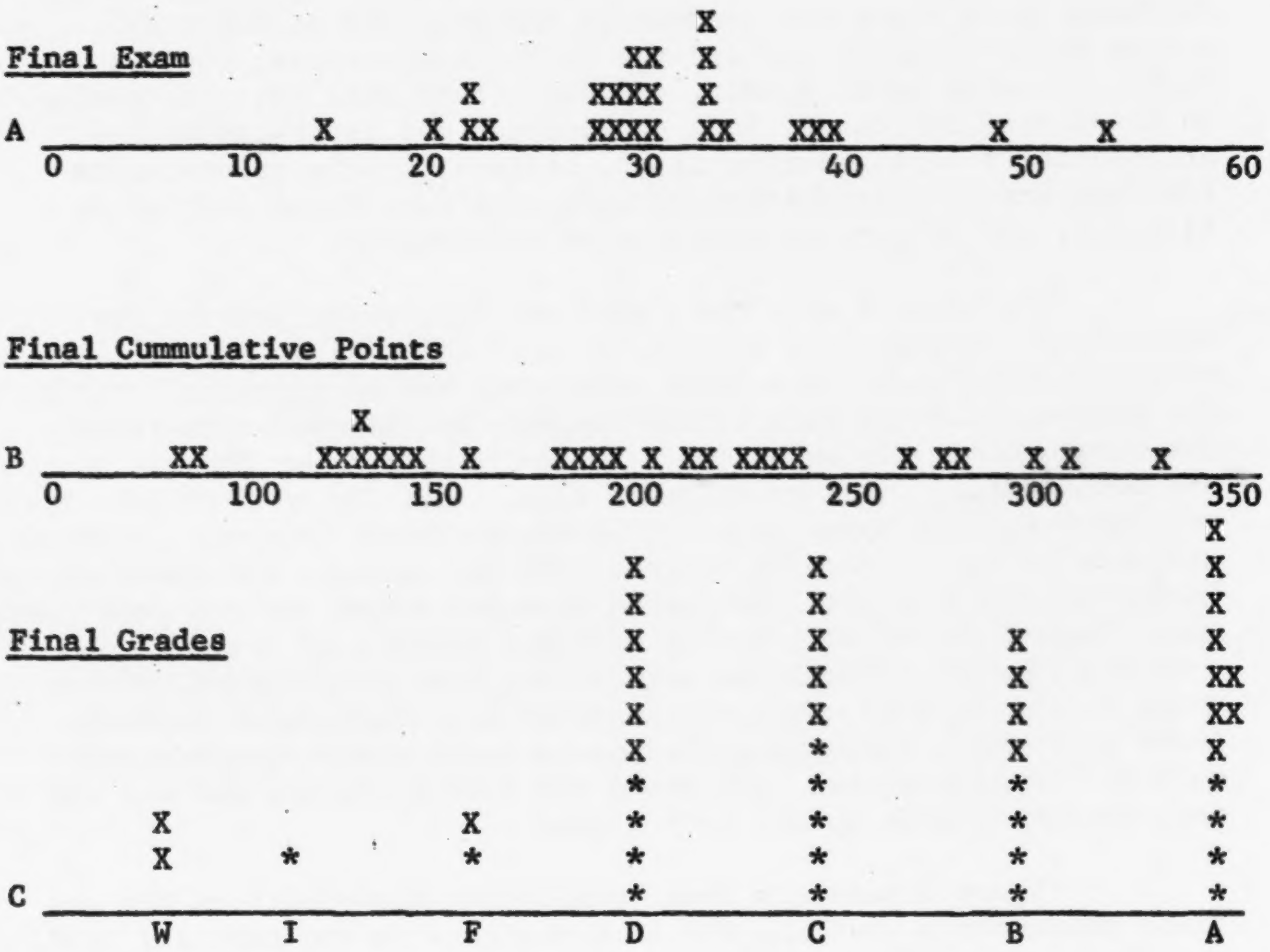

Figure 3 - A. Third examination, E3F8B3, distribution for Project students, Summer Session, 1969. Test was 70 items covering Ruch, 6th. Edition, Chapters 1-18, anf Reference Sections. (n=25)

B. Final cummulative points for Project class, SS69.

C. Letter grade distribution for two sections of Project class, Summer Session, 1969, showing Professor A section students (*) and Professor B section students (X).

CONCLUSIONS AND IMPLICATIONS

Summarizing an entire section of experimental course work risks over-simplification. In the opinion of this instructor, the Project classes differed from normal classes in several ways. The small size was very desirable, particularly since many of the students had been selected because they had shown evidence of having serious learning or motivational difficulties (as indicated by "qualifier status" or probationary status). However, the extremely early hour of the classes worked against those who remained unmotivated. If the class had been scheduled at a "more conventional and convenient" hour than seven a.m. attendance, and quite possibly response level, would probably have been higher.

The free-wheeling extra reading and writing that resulted from an open-door policy for extra credit is evidence by the sixteen extra abstracts and nineteen extra book reports submitted by a class of twenty-five. In addition, five students performed independent research projects and four participated in video-taping a serious discussion of the problems of qualifiers and probationers for the class. All of the extra work was done voluntarily by these students. It is the view of this instructor that these students were capable, and that they performed far beyond their usual amount of work for this class. By accepting the challenge of self-chosen extra credit, and by receiving extra credit for completing projects, the students found themselves reaching new, unexperienced and unexpected heights of output and performance. Reinforcement through discussions, critiques, points, and finally, grades, worked effectively in most cases. There were rare un-reachable students with severe learning or motivational problems which call for individual counseling (or therapy) beyond what the class-room teacher can supply. It is possible in classes of this kind, however, for the instructor to provide early diagnosis of these problems and to refer the student to professionals for help.

The atmosphere of encouragement for innovation, of close communications among Project staff at all levels, from seminar leaders to classroom instructors, gave far greater immediate feedback of all kinds about individual students in the entire range of the Project classes, and enabled the instructors to better understand potential and real learning problems which developed for specific students. The different formats of the two sections gave evidence that students respond favorably to a) self-paced extra reading, and b) reduced assignments studied in depth (see report of Professor Paul Ansfield).

Grouping students according to common characteristics enables them to form self-help study friends, social ties among students with like problems, and an esprit de corps which aids and facilitates learning. This instructor suggests strongly that administrative steps be taken to foster this type of grouping. Dormatory floors or "cottages" could be assigned by major, academic grade point level, class in college, etc. Mixing upper and lower class students of the same interests and majors in residence halls would facilitate advising and tutoring.

GENERAL PSYCHOLOGY 86 301 SS69
Bruce Bernard Black, PH.D.

This instructor noted, as for the past six years, that the students in today's university classrooms lack skill, practice, or familiarity with simple recitation. Small classes and instructor's expectations about recitation must be fostered to bring out this most important learning aid. Tutorials should be developed with discussions and seminars led by able seniors, by graduate students, or by professors, wherein the undergraduate learns to learn enough through study to recite intelligently about course materials without an open notebook or text before him. Verbal fluency is a measure of intellectual capability, and tragically we are not generally developing that skill among our undergraduates in the classroom. The Project classes in general psychology could have provided this extra learning, but the seven a.m. hour inhibited much participation for students.

Posting criterion scores by name made some of the Project students more aware of their own problems and caused them to ask for assistance. Several of the innovations in this class were designed to put realistic stress on the student without threatening at the same time failure if the challenge was not met. Complete lack of stress was facilitated in discussions, lectures, conferences, and even in off-campus social gatherings. The level of success might be measured by the high frequency use of the instructor's first name by Project students. This was encouraged and contributed to the ease of two-way communication and the frequent verbal feedback on assignments. The respect and dignity afforded the students by the Project staff was a quite strong force in implimenting the learning in the classes.

This latter influence was probably the most significant underlying thread tying the various experiences fostered by the Project to the classroom learning. From the first day of the summer registration, when new students were met in an informal picnic setting by their dean, through the seminar, counseling group, office and classroom experiences, these students knew that there was a staff which specifically cared how well they were doing. The weekly staff meeting and other exchanges of information among staff were not lost on the students. The self-organized social events which took place at staff homes were noted. The attempts by instructors and others with the Project to know the students as individuals and to facilitate their learning experiences during the term were influential, in the view of this instructor, in the positive attitudes shown by many Project students. The closest phenomenon in the psychological literature to that which was observed here might be the "Hawthorne Effect" observed and described by the Elton Mayo studies for Western Electric, and in other studies since. When the "administrators" care enough for those they supervise to visit with them, to learn with them, to know them individually, and to be accessible to them personally, positive responses from those supervised result. (This provides a rationale for discarding the old saw "familiarity breeds contempt". This fits situations, obviously, only when the newly familiar leader is comtemptable, but has been hiding it.)

In conclusion, this instructor enjoyed the opportunity to participate on the staff of the Research Project, and to introduce such innovations as have been described in teaching general psychology.

Appendix I

EVALUATION OF PSYCHOLOGY 86 301R
Paul Ansfield PH.D.

TEXT

The goal of the course in General Psychology, in which Project students were enrolled, was simply to provide a standard freshman - sophomore university course where there were opportunities to 1) have at least a minimum of academic success and 2) apply learning, reading and study skills taught students in special sessions as part of the Project. These goals were met in terms of the structure of the course in General Psychology and evaluation of students academic achievement.

COURSE STRUCTURE

The course of General Psychology comprised daily lectures and assigned readings in a textbook. Furthermore, all students purchased a workbook for use as a study guide to the text. The workbook was also used for practice in the techniques of answering the kinds of questions asked (multiple choice, true-false, matching, and filling-in-the-blank) in any survey course and most likely found in examination of material covered in the General Psychology course. It is important to note that answers to study questions raised in the workbook and study exercises in the workbook were keyed to the lecture material as well as the text. The lecture material, however, did not duplicate or paraphrase the text material. Lectures were planned to supplement the text and promote discussion. Several instructional films appropriate to the various topics covered were also shown. With only one exception, no other instructional tools or readings were used or assigned. The exception concerned an assignment related to the first landing on the moon by man. Students were asked to simply list no more than ten problems studied by psychologists that were concerned with the achievement of the moon walk. They were also asked to comment upon the psychological impact on American thought of success or failure of the moon landing. It was felt that such an assignment associated with current events might make their study of General Psychology more relevant to their daily lives and provide a further incentive for acquisition of related course material.

Students were told that the criterion for passing the course was not how well they were able to commit the textbook to memory, but rather how well they acquired the basic facts concerning the scientific study of mind and behavior from their reading and lectures. They were told they would be evaluated by the use of objective examinations.

GENERAL PSYCHOLOGY 86 301R
Paul Ansfield PH.D.

One major assumption was made about the students and helped to determine the structure of the course. For whatever other reasons, these students were selected for participation in the Project because they had previously encountered academic difficulties. All this not withstanding any other judgement about their motivations or scholastic talent. Based upon this assumption the course of General Psychology was structured as a "standard lecture survey course" with a minimum of extra reading assignments, projects, etc. It was felt that this consideration would help the Project students, much less able students, to cope with the obligations of the Project activities and a summer session, which made heavy demands on their time, motivation, and ability.

EVALUATION

Student academic achievement was evaluated through the use of non-comprehensive objective examinations. Each examination consisted of multiple-choice questions only. Examinations were scored for number of correct items with no adjustment for guessing. Scores on each examination were converted to T - scores and then averaged to arrive at a final achievement index which was statistically adjusted to exclude the effects of unusual raw score variance on the final average of examination scores. The resulting T - score distribution was "cut" for final grades, consistant with the performance of the class and the goals set for course by the instructor.

IMPRESSION AND COMMENTS

Upon reflection the overall impression one develops of the students enrolled in Psychology 86-301R is that they are lazy, that their motivation is quite low. This, for example, was seen with respect to the one extra assignment thought to be relevent, current, motivating and interesting, appeared to be a dud, since students papers were poor (i.e. copied from the newspapers) and more than half were turned in a week late. However, they seemed most unconcerned, indifferent or uninterested in that historic event. Many did not know the date of flight, etc. This was in contrast with another course of psychology taught to "regular" college students in the same summer and who received the same assignment. These students performed well with interest. It was also felt that compared to non-project students enrolled in a similar course, Project students simply, with a few exceptions, would not perform at best above average. The exceptions were clearcut. The instructor wondered why such students were in the Project at all. They had definite scholastic talents and earned a grade of "A" easily.

GENERAL PSYCHOLOGY 86 301R
Paul Ansfield PH.D.

All students appeared to require personal attention from the instructor; their success academically may be related to it.

Perhaps some of the laziness apparent in the Project students was due to the time the class was held (7:00 a.m.). This instructor felt this class hour is much too early for the type of students served by the Project. They are not fully awake and alert. When absent from class the excuse was: "I over slept".

Finally, based upon overheard students comments, it would appear that here was too much time scheduled for various activities. This is to say for some students two college courses, seminar sessions, counseling sessions, work assignments, reading and study-skill training, and the usual number of social activities present in a university summer session on top of any anxiety connected with the program interferred with their attaining better than minimum academic achievements.

RECOMMENDATIONS FOR FUTURE SUMMER PROJECT CLASSES

1. No class should be held at 7:00 a.m.
2. Classes should be small, maximizing personal attention to students.
3. Courses and activities must be well structured, but kept simple and at a minimum so as not to dazzel the students or interfere with their acquisition of better study-skills and the achievement of good academic standing.

ENGLISH COMPOSITION REPORT
Thomas H. Dollar

Appendix J

Since this special project course in English Composition was proposed as an experimental course, no basic assumptions were made beyond the assumption that the students who were enrolled in the course had experienced academic difficulties in the past. What they were to be taught and how they were to be taught would follow from an early determination of the special needs of these students.

It soon became apparent that most of the students in English 101 were unenthusiastic about writing. For most of them writing had always been something that one had done in response to an assignment; the result had usually been a perfunctorily written essay aimed at "satisfying" an assigned and often distasteful task. Few of the students had ever looked at writing as an exercise of their own minds or as a product imbued with their own personalities. Before any meaningful writing could occur, it was necessary to break down these prejudices.

At the beginning of the semester the students were told that no written assignments would be given; instead they were to write essays on subjects of their own choice, the only requirements being that the essays be intelligent and interesting. At first most of the students were nonplussed. However much they had disliked writing in the past, they had always felt more comfortable writing within the framework of an assignment. Eventually, however, most of the students learned that writing was easier and more interesting when they chose their own subjects.

After most of the students were writing fairly regularly, they were asked to make one significant change in their writing. Hitherto, many of the students had been writing personal experience narratives, a carryover from their high school days when they were often asked to write papers about last summer's vacation trip and similarly mundance topics. A quick survey of the writing they were being asked to do for other courses--chiefly term papers and essay examinations--demonstrated that writing personal experience papers was inadequate and unrealistic preparation for the kinds of writing that they were now doing for other classes and would be expected to do in the future. Class discussion further demonstrated that the kind of writing they would be expected to do was expository writing. In this way they were taught that writing expository essays was the only realistic preparation for future writing. The decision was made, therefore, to require that all of the writing for this course be expository.

ENGLISH COMPOSITION REPORT

Thomas H. Dollar

Class periods were mostly devoted to discussions of the students' own work. The students were encouraged to participate in the criticism of their own work and the work of others. After some initial hesitation, most of them participated freely. In working through their papers care was used to carry out the criticism in a systematic way so as not to confuse them with too much at one time. At the beginning, for instance, we discussed the importance of diction (the selection of individual words), and we gradually worked up to some of the larger and more interesting aspects of writing, such as rhetoric and style. Invariably, our criticism focussed on what could be done to help awriter improve his work. The students came to understand that unsuccessful writing was often the result of opportunities missed--opportunities for further development which they had created but had failed to recognize. Often they learned that in a single paper they had introduced enough material for two or three separate papers.

Few special instructional materials were used in class. For a short time we worked with an opaque projector, but the time involved in operating the machine, the noise of the machine, and the fact that the machine had to be used in a darkened room, eliminating visual contact between us, caused us to abandon its use. For a period of two weeks we used a tape recorder in composing a theme in class. Afterwards, the students were asked to evaluate the tape recorded sessions. Although most of them agreed that the project was useful, they thought that it had been too time consuming. They went on to suggest ways of using the tape recorder over a shorter period of time.

Work in class was complemented by the help that students received outside of class from the very cooperative and competent project staff who worked individually with the students in tutorial sessions and directed the students' Learning Center activities. Whatever improvement the students made in their writing was largely the result of the dedicated work of the project staff. Special credit is due the project co-director for his masterful coordination of all project activities.

The project course in English 101 was a success. The work of the students was serious and intelligent. It should be repeated that the essays were written on topics of their own choice. Some of the students were apparently just waiting for a chance to show what they could do. Their work was the best. Some of the students who started the semester with serious writing difficulties became competent writers, a few, in fact, were starting to become very good writers. Finally, a few students had such profound verbal deficiences that no amount of instruction could help them. In the opinion of the instructor these students were ill-advised to attend college and probably should be counselled out of school.

More than anything else, the work of the project during the summer session of 1969 confirmed the idea that students are responsive to an academic climate in which a great deal of individual help is offered them. The success of the project is proof of the old-fashioned educational theory that the most learning takes place when there is close personal contact between teacher and student.

Appendix K

WISCONSIN STATE UNIVERSITY - OSHKOSH
SCHOOL OF EDUCATION
Research Project - Teachers for the Disadvantaged

Student Profile
New Project Students - Continuing

I. Personal Data

Of the 58 students continuing at Wisconsin State University - Oshkosh but new to the Project, there are slightly more males than females, and approximately half are 19 years old. The actual age range is from 18 years (15 students) to 28 years (1 student), although there are only 5 students over 21. About 82% come from the freshman class, being recruited during the second semester of their freshmen year. The students were recruited from all divisions of the University, 35% coming from the School of Education, 35% from Letters and Sciences, approximately 7% fromd the School of Business, two students from the School of Nursing, and two who have made no educational or vocational decisions. Twenty-nine per cent of those outside the School of Education indicated a desire to change to Education.

II. Family Data

About 94% of the continuing students come from homes in which both parents are present. Five per cent come from broken homes, and 8% from homes in which one parent has died.

Their fathers range in age from 37 to 76, approximately half being between 40 and 50. Their mothers range in age from 38 to 69, over half being between 40 and 50. About 27% of the fathers are professional men, with another 38% in business. Over 60% of the mothers are housewives; about 8% are engaged in the professions; and another 8% are office workers. About 8% of the fathers and 3% of the mothers have had at least some graduate work; another 15% of the fathers and 20% of the mothers completed college, another 52% of the fathers and 46% of the mothers completed high school; about 8% of the fathers and 8% of the mothers did not go to school.

The majority of the continuing students (62%) come from homes with 2, 3, or 4 children in the family. Six per cent are only children; 17% come from families of 5, 6, 7, or 8 children; and 5% come from families of 10 or 11 children.

Fifteen per cent have brothers and/or sisters who attended college but did not graduate; 28% have college graduate siblings; and 12% have siblings now in college.

III. Community Data

Over 70% of the continuing students come from Wisconsin; twelve per cent from Illinois; two students from New York; and one student each from Ohio and Rhode Island. Over half classify their home community as a city or town; another 25% live in a suburb; and 12% live in a rural area. About 20% live within 25 miles of Oshkosh; another 12% live within 50 miles; another 35% live within 100 miles: Thus close to 70% live within 100 miles of Oshkosh. Only three students live over 500 miles away.

About 70% have spent most or all of their lives (eleven or more years) in their home communities. About 8% have lived in their home communities for less than 5 years.

IV. Present housing

(Data not valid - obviously not understood by students)

V. High School Background

Approximately 70% of the continuing students graduated from high school in 1968. Another 19-20% graduated in 1967, and the rest in 1966, 1964, and 1959.

About 50% came from high school graduating classes of 100-300 students; about 7% from classes under 100; about 3% from classes over 1,000. About 40% indicated that they had graduated in the top half of their high school class. A little over half indicated that they had been in a college preparatory program in high school.

Activities in which they were involved in high school include: sports - about 50%; music - about 35%; drama - about 18%; journalism - about 10%.

In rating their high school experience, about 60% said their academic background was good; another 13% rated it very good or excellent; 25% rated it poor; no one rated it very poor or disasterous. About 40% rated their high school social experience as excellent or very good; another 50% rated it good.

V. High School Background - Cont'd

Two students found it disasterous.

VI. Family Relationships

Ninety-five per cent of the students' parents were reported as being happy about their child's attendance in college. One student indicated that one of his parents was unhappy about it, and three students said that at least one parent was indifferent.

Most of the students (all but 8) are getting at least some financial assistance from their parents, one-third to one-half receiving almost total assistance.

The students apparently discuss many things with their parents, over half reporting that they had talked about work, school, sports, and themselves either quite often or occasionally in the previous month. A third or more had also talked about politics and religion either quite often or occasionally. No one reported that he never talked about school with his parents, and only four students said they never talked about themselves. About 22% said their parents had never visited Wisconsin State University - Oshkosh, but another 20% indicated that their parents had visited very often, at least 10 times. About 50% of the parents have visited the campus between one and five times.

VII. Relationship to College Education

Ninety per cent of the continuing students indicated that they came to college in order to continue their education and to prepare themselves for a better job. About half also indicated that their parents' desire influenced their decision. Ten students thought avoiding the draft to be an important reason for college attendance; four wish to avoid going to work; four feel the pressure of family tradition; and three hope to find a mate.

Reasons for choosing Wisconsin State University - Oshkosh break down as follows: close to home and good reputation in student's interest area - 50% each; friends here - about 5%; inability to get into another school - about 15%; party reputation - about 7%; relative attended - about 13%.

About 30% indicated that no one helped them decide on Wisconsin State University - Oshkosh. Over half were helped by a member of their immediate family, most often by their father. About half also received help from a friend or from some other person, often a high school counselor.

VII. Relationship to College Education

The students now entering the Project attained an average G.P.A. last semester of 1.45. Their average cumulative G.P.A. stands at 1.262.

VIII. Miscellaneous - Employment

Almost 90% of the students were employed before entering college, 22% full time. Twenty-four per cent were working at the time of applying to the Project, about 7% full time. Eighty per cent indicated that they would like to work during this academic year. Twenty-eight per cent indicated having been involved in volunteer work. About half reported some ability to type; 10% reported experience working with visual aids. Various other skills - clerical and mechanical, expecially - are represented.

Twenty-two per cent reported owning their own car, used primarily for social activities and errands.

WISCONSIN STATE UNIVERSITY - OSHKOSH
SCHOOL OF EDUCATION
Research Project - Teachers for the Disadvantaged

Student Profile
New Project Students - Qualifiers

I. Personal Data

On the basis of 21 responses by summer qualifiers for the Project, there are approximately three times as many boys as girls - 15 boys, 6 girls. All are entering college for the first time. Most (about 90%) are 18 or 19 years old. One is 17, one is 20, and one is 22. About half the students did not indicate in which division of the university they would enroll. Of those who did respond, about 42% indicated the School of Education, another 34% indicated Letters and Sciences, and the remainder indicated the School of Nursing.

II. Family Data

Over 70 per cent of the qualifiers come from homes in which both parents are present. Fourteen per cent come from broken homes, and 16% from homes in which one parent (in each case the father) has died.

Their fathers range in age from 39 to 59, about half being between 40 and 50 years of age. Their mothers range in age from thirty-eight to 58, about two-thirds being between 40 and 50. About 19% of the fathers are professional men and another 38% are engaged in business. About 64% of the mothers are housewives; about 20% do office work; and about 10% are engaged in nursing. About 10% of the fathers and none of the mothers have had graduate-level training; another 10% of the fathers and 5% of the mothers completed college; the remainder of the fathers and all but one of the mothers completed high school.

About half the qualifiers come from homes in which there are four children; none are only children; a quarter have one or two siblings; and the rest come from families with 5 - 9 children. Half have brothers and/or sisters who attended college but did not graduate; about 14% have college graduate siblings; and 18% have siblings now in college.

III. Community Data

About 85% of the qualifiers come from Wisconsin, the remainder coming from Illinois (all from the Chicago area). Over 60% classify their home community as a city or town, the rest coming from suburban communities. About 18% live within 25 miles of Oshkosh, another 18% live within 50 miles; another 50% live within 100 miles; and the remainder live within 200 miles of Oshkosh.

About 70% have lived most or all of their lives (eleven or more years) in their home communities. About 18% have lived in their home communities less than five years.

IV. Present Housing

About 95% of the qualifiers lived at home with their parents, in a privately-owned home, before coming to college.

V. High School Background

About 75% of the qualifiers are graduates of the class of 1969. One student graduated in 1964, and the remainder in 1967 and 1968.

About half came from high school graduating classes of 100-300 students; one student came from a class of fewer than 100, one from a class of more than 1,000, the rest from classes of 300 to 700. Less than half had been in college preparatory programs.

High school activities in which qualifiers were involved include: sports - over 50%; music - about 18%; drama - about 18%; and journalism - about 10%.

In rating their high school experience, about 64% said their academic background was good; another 10% rated it very good; 25% rated it poor. About 50% rated their high school social experience as excellent or very good; about 50% rated it good; one student said it was poor.

VI. Family Relationships

All of the qualifiers reported that their parents were happy about their attending college.

Eighteen per cent of the students are getting no financial assistance from their parents. About 60% are receiving total assistance.

The qualifiers apparently talk things over with parents; about 75% reporting that they discussed work, school, religion, and themselves quite often or occasionally in the previous month. Half discussed politics and sports quite often or occasionally.

No one had never discussed work, and only one student each reported never discussing school or himself. About 36% of the parents have never visited Wisconsin State University - Oshkosh; 50% have visited once; about 14% have visited 10 or more times.

VII. Relationship to College Education

Close to 85% of the Qualifiers reported that they wanted to attend college in order to continue their education. About 60% indicated that for them college was the means by which they might attain a better job; about a third felt the influence of parental desire; and about 18% thought avoiding the draft to be a good reason for college attendance.

Reasons for choosing Wisconsin State University - Oshkosh break down as follows: good reputation in student's interest area - about 60%; close to home - about 50%; friends here and brother and sister attended - about 27% each; inability to get into another school - about 10%.

About 35% indicated that no one helped them decide on Wisconsin State University - Oshkosh. Over half were helped by a member of their immediate family, most often by their mother. About half also received help from a friend or from some other person, 10% receiving assistance from a high school counselor.

VIII. Miscellaneous - Employment

Over 90% of the Qualifiers have been employed, about 25% full time. About half were employed at the time of application, about 10% full time. About 60% indicated that they would like employment during this academic year. Approximately 23% have been involved in volunteer work. Over 60% reported some ability to type; about 15% reported experience with visual aids. Clerical or mechanical skills were also reported by about 40% of the Qualifiers.

Over 25% reported owning their own cars, used primarily for social activities and errands.

Appendix L

FINAL REPORT

Supplementary to
RESEARCH PROJECT
TEACHERS FOR THE CULTURALLY DISADVANTAGED

SEMINAR REPORTS

SEMINAR REPORT
Submitted by - Barbara Stuhlfauth

A central aspect of Project BESTT was the personal development seminars, each organized to bring 12 to 15 Project students together with a seminar leader on a regular basis. In my experience with the Project during the 1969 summer session, I "led" two of these seminars. Although the makeup and attitude of the two groups was quite different, my approach to each was the same, and although at times they seemed headed in different directions, final evaluation sessions displayed that both groups arrived at approximately the same point.

My morning group was composed of all continuing students, in contrast to the afternoon group, which was made up of about 2/3 continuing students and 1/3 qualifiers. I noticed immediately that the afternoon group was both more lively and more enthusiastic than the morning group. They apparently wanted help and definite direction from me, and seemed eager to do whatever was asked of them. The morning group, however, seemed listless, apprehensive, and unwilling to commit themselves.

My approach to both groups was that of providing an atmosphere for free exchange of ideas. Though the seminars were designed to increase the students' study skills, I soon decided that little or nothing was being accomplished by structured sessions in which I assumed responsibility for presenting topics and materials. The afternoon group expressed a desire for me to "teach" them, but when I did I sensed a feeling of impatience. The morning group remained somewhat negative no matter what was suggested. I therefore decided to leave seminar meetings totally unstructured (except for announcements and Project business), and shifted responsibility for development to the students themselves. The pilot student co-leaders (Mike Portman and George Schraufnagel) proved extremely helpful in assisting the shift. They provided a kind of transition by which leadership responsibility was gradually passed from my shoulders to the co-leaders' shoulders, and finally to the shoulders of the entire group. A few of our sessions were rather frustrating both to me and to the students, but I am convinced that the majority of the students did learn that motivation, whether it be for studying or for approaching some other goal, must come from within, and that no one (teacher, fellow student, parent) can impose motivation upon an individual who has none within himself.

SEMINAR GROUP

Barbara Stuhlfauth

In the evaluation sessions at the end of the summer, members of both groups lamented the fact that the summer was over, for they said that they had just learned what the seminars were all about and were now ready to assume responsibility for their direction. The comments made include the following: "get close to people with similar problems"; "nobody can tell you how to study...."; "it's up to the kids to bring up things which are important to them"; "it's a lot better than going to a regular class"; "by the end everyone of us was taking over leadership". It seems to me that both seminar groups accomplished the goal of having each individual accept responsibility for himself. It is my conviction that if each can do that, he can then use the various study skills materials and other aids (reading center, counseling center, speech and hearing clinic, librarians, tutors, advisors) to which he was introduced during the summer. Without self-motivation, all these aids are useless.

Of course, not all the students succeeded in learning how to help themselves; it seems that those who lost interest or psychologically "dropped out" were those who sat back and waited for the Project to perform miracles. Some who apparently had this attitude at the beginning of the summer made significant attitudinal changes; they learned a great deal. Others simply did not. Perhaps if there had been more time, more would have understood and accepted responsibility for the seminar. I would see my role as a facilitator, perhaps as a questioner or director, but certainly not as a "teacher", at least not in the traditional concept of the teacher. I would consider myself successful if the majority of my students discovered for themselves how they are motivated and could then use that understanding to direct themselves along the paths they choose to follow.

SEMINAR GROUP
Submitted by - William H. Soronen

The complexity of the seminar would make it impossible to give proper emphasis to the dynamic interrelationships that took place. The seminars were originally designed to be personal development seminars; concentrating more specifically on developing study skills.

The initial sessions were designed to get students acquainted, to introduce them to seminar format, and to get them to comfortably express their classroom and studying concerns.

Library tours, paragraph and abstract writing, studying, time scheduling, note taking, taking tests, and the university catalogue provided topics for discussion. Leadership for the first sessions came from the seminar leader and in the fourth week switched to the group members who volunteered to take on the responsibility for leading the discussions. An apparent lack of involvement and responsibility on the part of the seminar members and a feeling of frustration on the part of the seminar leader as to what was being accomplished, led to a discussion regarding how the seminar could be improved. The sessions organized by seminar members, varied considerably in length and content. (One student prepared a seven page handout on biblography format. Two students contacted the reference librarian and arranged an hour presentation regarding the types and uses of reference books). The average length of presentation was about twenty-five minutes.

Although students stated that they became aware of some new approaches in their study habits, most of them felt that they already knew what they should be doing, but were evidently not motivated to change their behavior. What appeared to be more important to students was that they could identify with each other and help each other. The academic problems and concerns that were expressed by students were not unique to any one individual. This common bond provided the key for establishing a comfortable atmosphere.

As the summer session progressed little change was observable. However, during the last two weeks many of the individuals appeared to be highly motivated in their attempts to succeed. I would question any relationship with what was being discussed in seminar and the apparent motivation of the students.

An evaluation tape, made at the last session, provided the best indicator of what the Project meant to the students. The following quotes were taken from the tape: "Seminars were beneficial in that you got to know people." "Got a lot of information about school." "Just being able to meet kids who are in the same boat is helpful." "I could go to someone (in the Project) and I'd know they'd be listening." "I learned to talk with instructors." "You know you have to work, but at least you have a better chance now." "It (the Project) makes you go at it." "The Project is practical." "The Project does not perform miracles. You get out of it what you put into it." "I liked the individual attention I got."

Probably the most significant event that indicated the meaningful nature of the Project came on the last day when an entire seminar group had a "sit in" in the Project office. They were aware that the Project would not be continued in the fall. The students who had started the summer session as confused, unconcerned, non-motivated individuals, found it necessary to display in a physical manner their concern. During their non-violent protest, they inquired as to what might be done about continuing the Project and finally decided to take the responsibility to get all Project students together in the fall in order to continue as many aspects of the Project as is feasible.

It is my belief that one major reason for the success of the Project was the fact that these students were treated as more than a social security number. They had ideas and concerns. This was probably the first time in their university career that they felt anyone showed an interest in them as a person.

SEMINAR REPORT
Submitted by - Mary Hartig

It was decided in planning sessions before summer school that the personal development seminars would concentrate on study skills, although we decided not to structure them so much that there would not be time to engage in other activities that the students might be interested in.

This decision was based on the needs the students themselves expressed in their application for admission to the Project. In response to the questions, "What is your reason for wanting to enter the Project?", typical answers were:

1. "I feel it will help me in learning the correct way to study and relating to other students and teachers."

2. "The program might help me to find study habits, which I need very much."

3. "I feel this program will help me to have better study habits and a better interest in courses."

4. "My concentration is bad and I feel that I have not been able to work at full capacity because of a lack of enthusiasm due to poor study habits."

5. "I am honestly lost. I cannot seem to build study habits, and I lack self-confidence and am not sure how to obtain the goals I am striving for."

6. "I need help."

With this in mind, I identified five objectives for my two seminars:

1. To familiarize students with basic study skills.

2. To make students aware of the importance of good student - teacher relationships.

3. To familiarize students with some university services, which would be helpful to them.

4. To establish a relationship of trust and understanding between the students and the seminar leader, and other program leaders.

5. To establish an identity with the Project as a whole and with students with academic problems.

The first sessions were spent in testing. We explained to the students that because this was an experimental program, a certain amount of testing was desirable both at the beginning of the Project and at the end, in order to measure the effectiveness of the program. The Testing Center administered three reading tests, the Diagnostic Reading Test, Word Clues, and Reading for Understanding. The results of these tests were interpreted to each student by the Reading Center staff and recommendations were made to them. Many students took advantage of this service. Then they had actual practice writing, first an abstract of a paragraph and then of a whole article.

One session was spent discussing the importance of establishing a good relationship with a teacher and how this can be done. We set up some situtations and role-played them.

Programming and reviewing the use of the college catalog took two sessions. We also examined the General Education requirements of the University. This seemed especially useful to the freshmen.

Two video-tapes were shown. One was prepared by Dr. Bruce Black on motivation. The students took notes on this lecture and we used this as the basis for a general study of note-taking. The other tape was prepared by Dr. Black and four Project students on problems of studying and becoming motivated to study.

One session was spent editing a theme with special attention being paid to problems of diction -- appropriateness and exactness of expression.

Two films were shown. One was a Canadian film called "No Reason to Stay" on the problem of school dropouts. The other was called "Now Is The Time", which presented the serious problems of race relations.

At the end of the session, a questionnaire was given to the students on nine major components of the Project. The students were asked to both rate and rank these components. The last session was spent taping a general discussion of various aspects of the program. Both negative and positive feelings were revealed. Some students indicated that they felt the emphasis on study skills had been a waste of time. Others said they did not enjoy it, but they knew it was valuable. Some liked the handouts because they could use them for later reference.

The positive comments all seemed to express the idea that now someone cared whether or not they got through school. Someone was now behind them. Someone was willing to sit down with them and carefully work out a program. This they felt was more satisfactory then catching a teacher as he went out the door and having him sign the program without even looking at it. They enjoyed being able to talk with teachers on an informal basis.

Kris Salscheider and Beth Feirer were valuable assistants.

Appendix M

FINAL REPORT

Supplementary to
RESEARCH PROJECT
TEACHERS FOR THE CULTURALLY DISADVANTAGED

Work Experience Program

Katherine Kiedrowski
Work Experience Supervisor

Results of the
Summer 1969
Work Experience Program

August 22, 1969
Katherine Kiedrowski

INTRODUCTION

During the summer 1969, 55 of the 93 Project students participated in the work experience program. Students participating in the summer work experience program were not primarily in the School of Education as they had been during the previous academic year. Therefore, work assignments were made on the basis of student interest, job availability and with some attempt where possible at relevancy to the student's major. Students were assigned to the following work stations:

Campus School Classrooms, K through 9
Campus School Library
Campus School Office
Campus School Art Department
Campus School Audio-Visual Department
University Guidance and Counseling Department
University Library
University Testing Center
University Art Department
University Biology Department
University Residence Halls
Computer Center
Research Project itself

EVALUATION

Essentially the same tool for evaluating the 1968-1969 Project students was used for the summer Project students with the appropriate changes in the listing of job duties the students performed.

RESULTS

An examination of the first column in Table 1 indicates that most of the students performed duties related to teaching, clerical, library and audio-visual skills. The top eleven duties according to the frequency of the number of students performing the duty are:

Preparing teaching materials
Cleaning
Assist in operation of A-V equipment
Aiding students and faculty in locating books & materials
Answering phone and taking messages
Operation of mimeograph, ditto and/or other duplicating machinery
Filing books, materials, tapes, etc.
Compiling materials or data
Delivering materials or messages to other departments
Operation of video tape playback
Cataloging books and materials

Looking at columns two and three of Table I we see that the students proportionately spent most of their time on duties of a teaching or clerical nature. Although the list of the top ten duties, according to frequency of performance, indicates that the duties are not necessarily the same as those performed by most of the students and it indicates that they reflect performances of a more skilled nature:

Biology Laboratory Assistant
Classroom operation of closed circuit TV
Operation Unit record equipment
Assisting teacher with classroom activities and games
Observing instructors classes
Typing
Play with children
Reception duties
Operation of calculator
Operation of mimeograph, ditto and/or other duplicating machinery

Supervisors and students generally agreed with each other as to what duties the students spent most of their time performing with the exception that:

1.) more supervisors (5) than students (1) indicated "general clerical filing" as a duty most often performed;

2.) more students indicated the following duties as "most often performed" as compared with the supervisors:

Assisting teacher with classroom activities and games, 5 to 2.

Assist in operation of A-V equipment, 5 to 2.

Typing, 7 to 3.

Operation of mimeograph, ditto and/or other duplicating machinery, 8 to 4.

Cleaning, 7 to 1.

Observing instructors classes, 6 to 2.

Having worked closely with the work experience component I feel free to postulate some reasons for these discrepencies. First, a desparity of student and supervisors perceptions of a duty might account, for example, for the higher student response to "assist in operation of A-V equipment" - students feeling they assisted and supervisor feeling they actually operated (compare responses to item #18 with item #12). Secondly, some supervisors may have been reluctant to admit, for the purpose of evaluation, that students spent much of their time "cleaning" or "observing instructors classes".

Table I, columns 3 through 6 and 7 through 9, discloses the value rating students and supervisors gave the duties performed. The following 14 duties were checked as of "great value" by 50% or more of the students:

Tutoring - Helping child with lessons
Observing instructors classes
Biology laboratory assistant
Supervising Learning Center
Operation of unit record equipment
Caring for needs of individual children as they arise and help child feel secure that he has someone to advise him
Assisting teacher with classroom activities and games
Classroom operation of closed circuit TV
Co-led seminar discussions
Playing with children
Entering grades
Typing
Operation of calculator

This list would seem to purport that the students felt those duties related to teaching and to the development of technical skills were of greatest value. Supervisors apparently felt the same way as can be seen in the following list of duties indicated by 50% or more of them as of "great value":

Biology laboratory assistant
Preparation of Project Newspaper
Supervise Learning Center
Seminar Planning
Operation of calculator
Basic statistical analysis
Preparing scrapbooks for archives
Operation of opaque projector
Operation of 16mm and 35mm projector
Operation of tape recorders
Operation of record players
Classroom operation of closed circuit TV
Assisting teacher with classroom activities and games
Tutoring - Helping child with lessons
Co-lead seminar discussions
Library desk duties

A glance at columns 6 and 9 of Table I shows that supervisors found no significant amount of duties of little value. Their responses were concentrated in the "great" and "some" value columns. Students on the other hand, tend to be of a routine or menial nature, such as "cleaning", "painting", "answering phone and taking messages", "taking attendance", "pick up and delivery of mail" and "preparing scrapbooks for archives".

Table II, the next to be examined, attempts to give us a picture of any change in the student's attitude. Responses of both the student and supervisors generally tended to reflect a more positive student attitude with a slight exception of "attitude toward teaching". This is probably due to the fact that fewer work experience students were in the School of Education and, therefore, indicated "no change" in their attitude toward teaching. Also fewer work supervisors were in Education related positions and just did not respond to that question as it was irrilevant to them and their student assistant(s).

The results of the general work experience evaluation question are found in Table III. Most of the students and supervisors rated the work experience component as excellent or very good, with the supervisors tending to evaluate it a little higher than students.

Table IV gives us the means of the students' and supervisors' responses to the attitude and general evaluation questions. A comparison of the means shows that: 1) the means for both students' and supervisors' responses were faily close; 2) that the supervisors tended to rate the students attitude more positively than the students themselves did; and 3) that perhaps the most significant of the 4 measurements as indicated by the closeness of the students and supervisors mean responses was the evaluation of the work experience.

CONCLUSION

To summarize, the following conclusions might be drawn:

1.) most of the students who worked in the program during the summer performed a broad spectrum of duties in the teaching, clerical, library and audio-visual fields;

2.) the students appear to have spent most of their work time on duties in the teaching or clerical fields and the duties reflect performances of a more skilled nature;

3.) both students and supervisors expressed that those duties related to teaching and to the development of technical skills were of greatest value to the students;

4.) there was a general trend towards a more positive student attitude toward the job, teaching and school with the attitude toward teaching being the lowest (this probably being due to the fewer number of Education students in the Project).

5.) there was a tendency for students and supervisors to rate the work experience program as very worthwhile (excellent - very good), although the supervisors were inclined to evaluate it higher than the students.

TABLE I
Duties Performed by Students

Item	Number of Students who performed duty	Number of times duty was checked as "most often performed"		Value Rating of Duties					
				Student			Supervisors		
		Stud.	Supv.	1 Great Value	2 Some Value	3 Little Value	1 Great Value	2 Some Value	3 Little Value
A. Teaching Process									
1. Reading to Children	3	0	1	0	1	0	1	0	0
2. Playing with Children	6	3	1	3	2	1	0	2	0
3. Tutoring - helping child with lessons	6	2	2	6	1	1	3	2	0
4. Correcting tests	5	0	0	0	3	1	0	2	0
5. Entering grades	5	0	0	0	3	1	0	2	0
6. Preparing teaching materials	17	6	7	5	6	2	3	10	1
7. Preparing bulletin boards	6	0	0	0	2	2	0	1	0
8. Assisting teacher with classroom activities & games	9	5	2	7	0	2	5	2	0

TABLE I - Continued
Duties performed by Students

Item	Number of Students who performed duty	Number of times duty was checked as "most often performed"		Value Rating of Duties					
				Student			Supervisors		
		Stud.	Supv.	1 Great Value	2 Some Value	3 Little Value	1 Great Value	2 Some Value	3 Little Value
9. Caring for needs of individual children as they arise and help child feel secure that he has someone to advise him	9	2	2	7	2	0	4	0	0
10. Assist teacher in recording development of children	7	1	0	3	4	0	0	1	0
11. Take attendance	8	1	0	0	1	6	0	1	2
B. Audio Visual									
12. Classroom operation of closed circuit TV	11	9	9	7	3	1	9	0	0
Operation of Video Tape Recorder	11	7	9	8	2	0	9	1	0
Operation of Video Tape Play-back	13	9	11	9	6	0	11	1	0
13. Operation of 16mm projector	9	1	1	2	1	0	8	1	0
14. Operation of 35mm projector	8	0	1	1	2	0	8	0	0
15. Operation of tape recorders	11	0	1	3	3	1	8	3	0

TABLE I - Continued
Duties Performed by Students

Item	Number of Students who performed duty	Number of times duty was checked as "most often performed"		Value Rating of Duties					
				Student			Supervisors		
		Stud.	Supv.	1 Great Value	2 Some Value	3 Little Value	1 Great Value	2 Some Value	3 Little Value
16. Operation of record playback	10	0	2	1	4	2	8	1	1
17. Operation of opaque projectors	6	2	0	1	1	2	6	0	0
18. Assist in the operation of audio visual equipment	16	5	2	7	6	1	7	3	0
19. Service AV equipment	4	0	0	0	1	1	1	3	0
C. Library Related									
20. Cataloging books & materials	13	4	4	4	5	3	3	3	1
21. Preparing library books for grade levels	3	1	0	0	2	0	1	1	0
22. Processing library books & materials	6	1	0	2	0	1	0	5	0
23. Aiding students & faculty in locating books & materials	6	1	0	2	0	1	0	5	0
24. Filing books, materials & tapes	14	3	3	4	6	2	1	5	0

TABLE I - Continued
Duties Performed by Students

Item	Number of Students who performed duty	Number of times duty was checked as "most often performed"		Value Rating of Duties					
				Students			Supervisors		
		Stud.	Supv.	1 Great Value	2 Some Value	3 Little Value	1 Great Value	2 Some Value	3 Little Value
25. Alphabetizing & checking accuracy of material	12	2	2	4	5	1	1	2	1
26. Library desk duties	2	0	2	0	0	0	1	0	1
27. Preparing scrapbooks for archives	1	1	1	0	0	1	1	0	0
D. Clerical									
28. Preparing materials for machine processing	10	2	3	3	6	1	1	5	1
29. Maintaining necessary office supplies	9	3	4	1	6	2	1	4	3
30. General clerical filing	7	1	5	2	4	1	2	4	1
31. Answering phone & taking messages	16	4	2	3	2	9	1	6	1
32. Compiling materials or data	14	5	6	5	7	1	2	6	1
33. Reception duties	4	2	3	0	0	0	0	3	1

TABLE I - Continued
Duties Performed by Students

Item	Number of Students who performed duty	Number of times duty was checked as "most often performed"		Value Rating of Duties					
				Student			Supervisor		
		Stud.	Supv.	1 Great Value	2 Some Value	3 Little Value	1 Great Value	2 Some Value	3 Little Value
34. Basic statistical analyses	1	0	1	0	0	0	1	0	0
E. Office Equipment									
35. Typing	12	7	3	6	5	2	4	4	0
36. Operation of mimeograph, ditto and/or other duplicating machinery	16	8	4	3	6	2	1	6	2
37. Operation of calculator	2	1	1	1	1	0	1	1	0
38. Operation of unit record equipment	1	0	1	1	0	0	0	0	0
084 Sorter	3	2	1	1	0	1	0	1	0
548 Interpreter	3	3	1	1	0	1	0	1	0
085 Collator	3	2	1	1	0	1	0	1	0
519 Reproducing punch	3	2	1	1	0	1	0	1	0
029 Key Punch	1	1	1	0	0	0	0	1	0
39. Operation of 360 computer system	1	1	0	1	0	0	0	0	0

TABLE I - Continued
Duties Performed by Student

Item	Number of Students who performed Duty	Number of times duty was checked as "most often performed"		Value Rating of Duties					
				Students			Supervisors		
		Stud.	Sup.	1 Great Value	2 Some Value	3 Little Value	1 Great Value	2 Some Value	3 Little Value
F. Project Activities									
40. Proctor tests	4	0	0	0	4	0	0	4	0
41. Assist in programming	4	0	0	0	4	0	0	4	0
42. Co-led seminar discussions	4	1	3	2	0	0	2	2	0
43. Seminar Planning	4	0	0	0	4	0	4	0	0
44. Supervised Learning Center	2	0	0	2	0	0	2	0	0
45. Preparation of Project Newspaper	1	0	0	0	0	0	1	0	0
G. Miscellaneous									
46. Delivering materials or messages to other deptm.	14	3	2	2	5	5	1	7	5
47. Cleaning	17	7	1	1	4	10	0	6	1
48. Painting	1	0	0	0	0	1	0	1	0

TABLE I - Continued
Duties Performed by Students

Item	Number of Students who performed duty	Number of times duty was checked as "most often performed		Value Rating of Duties					
				Student			Supervisor		
		Stud.	Supv.	1 Great Value	2 Some Value	3 Little Value	1 Great Value	2 Some Value	3 Little Value
49. Pick up and delivery of mail	11	2	0	0	2	8	9	6	2
50. Observing instructors classes	9	6	2	9	0	0	4	3	0
51. Biology laboratory assistant	2	2	2	2	0	0	2	0	0

TABLE II
Evaluation of Student Attitude

	STUDENT					SUPERVISOR				
	Less Positive		No Change	More Positive		Less Positive		No Change	More Positive	
Attitude toward job	4	4	17	14	8	1	1	12	20	14
Attitude toward teaching	2	1	20	12	8	0	0	9	13	13
Attitude toward school	2	4	12	21	8	0	0	11	21	11

TABLE III
General Evaluation of Work Experience

	STUDENT	SUPERVISOR
Excellent	16	12
Very Good	14	27
Good	9	3
Fair	6	4
Poor	1	2

TABLE IV
Means of Evaluation of Attitude and Work Experience

	STUDENT X	SUPERVISOR X
A.		
Attitude toward job	3.5000	4.0000
Attitude toward teaching	3.4722	4.1250
Attitude toward school	3.7250	4.0270
B.		
Evaluation of work experience	3.9024	4.0000

Appendix N

COLLEGE DESCRIPTIVE INVENTORY

Name________________________________Age_____Year in College___________

Professional Goal____

The purpose of this instrument is to measure the meaning of certain concepts related to college life by having you judge them against a series of descriptive adjectives.

In scoring these scales, please make your judgment on the basis of what these concepts mean to you.

Be sure you place only one mark on each scale; do not omit any. If certain adjectives seem unrelated to the concept, please score them as best you can. Make each item a separate and independent judgment Work at a fairly high speed through the scales; it is your first impressions about the concepts that are important. However, please do not be careless.

Each scale is separated by seven blank spaces. Each blank represents a specific degree of intensity. The blank spaces from left to right read as follows:

Very Moderately Slightly Neutral Slightly Moderately Very

EXAMPLE:

Describe: SIT-INS

Good			X					Bad
Unsociable						X		Sociable
Kind		X						Cruel
Beautiful				X				Ugly
Successful			X					Unsuccessful
Meaningful	X							Meaningful
Negative					X			Positive
Boring							X	Interesting
Fair	X							Unfair
Worthless							X	Valuable
Pleasant					X			Unpleasant
Harmful						X		Beneficial
Necessary			X					Unnecessary

START HERE:

Describe: COLLEGE

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: COLLEGE COURSES

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: RESIDENCE HALL PROGRAM

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: ENGLISH

Good	___	___	___	___	___	___	___	Bad
Unsociable	___	___	___	___	___	___	___	Sociable
Kind	___	___	___	___	___	___	___	Cruel
Beautiful	___	___	___	___	___	___	___	Ugly
Successful	___	___	___	___	___	___	___	Unsuccessful
Meaningful	___	___	___	___	___	___	___	Meaningless
Negative	___	___	___	___	___	___	___	Positive
Boring	___	___	___	___	___	___	___	Interesting
Fair	___	___	___	___	___	___	___	Unfair
Worthless	___	___	___	___	___	___	___	Valuable
Pleasant	___	___	___	___	___	___	___	Unpleasant
Harmful	___	___	___	___	___	___	___	Beneficial
Necessary	___	___	___	___	___	___	___	Unnecessary

Describe: GRADES

Good	___	___	___	___	___	___	___	Bad
Unsociable	___	___	___	___	___	___	___	Sociable
Kind	___	___	___	___	___	___	___	Cruel
Beautiful	___	___	___	___	___	___	___	Ugly
Successful	___	___	___	___	___	___	___	Unsuccessful
Meaningful	___	___	___	___	___	___	___	Meaningless
Negative	___	___	___	___	___	___	___	Positive
Boring	___	___	___	___	___	___	___	Interesting
Fair	___	___	___	___	___	___	___	Unfair
Worthless	___	___	___	___	___	___	___	Valuable
Pleasant	___	___	___	___	___	___	___	Unpleasant
Harmful	___	___	___	___	___	___	___	Beneficial
Necessary	___	___	___	___	___	___	___	Unnecessary

Describe: WSU-O

Good	___	___	___	___	___	___	___	Bad
Unsociable	___	___	___	___	___	___	___	Sociable
Kind	___	___	___	___	___	___	___	Cruel
Beautiful	___	___	___	___	___	___	___	Ugly
Successful	___	___	___	___	___	___	___	Unsuccessful
Meaningful	___	___	___	___	___	___	___	Meaningless
Negative	___	___	___	___	___	___	___	Positive
Boring	___	___	___	___	___	___	___	Interesting
Fair	___	___	___	___	___	___	___	Unfair
Worthless	___	___	___	___	___	___	___	Valuable
Pleasant	___	___	___	___	___	___	___	Unpleasant
Harmful	___	___	___	___	___	___	___	Beneficial
Necessary	___	___	___	___	___	___	___	Unnecessary

Describe: ASSIGNMENTS

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: SOCIAL LIFE

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: PROFESSORS

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: COUNSELING

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: HISTORY

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: READING

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: STUDENT UNION

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: VIET NAM

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

Describe: BEER BARS

Good ___ ___ ___ ___ ___ ___ ___ Bad
Unsociable ___ ___ ___ ___ ___ ___ ___ Sociable
Kind ___ ___ ___ ___ ___ ___ ___ Cruel
Beautiful ___ ___ ___ ___ ___ ___ ___ Ugly
Successful ___ ___ ___ ___ ___ ___ ___ Unsuccessful
Meaningful ___ ___ ___ ___ ___ ___ ___ Meaningless
Negative ___ ___ ___ ___ ___ ___ ___ Positive
Boring ___ ___ ___ ___ ___ ___ ___ Interesting
Fair ___ ___ ___ ___ ___ ___ ___ Unfair
Worthless ___ ___ ___ ___ ___ ___ ___ Valuable
Pleasant ___ ___ ___ ___ ___ ___ ___ Unpleasant
Harmful ___ ___ ___ ___ ___ ___ ___ Beneficial
Necessary ___ ___ ___ ___ ___ ___ ___ Unnecessary

APPENDIX O

School of Education
Wisconsin State University
Oshkosh, Wisconsin

December 4, 1969

Personal Development Seminar as a Part of, or an Attachment to, Orientation to Public Education 11-101

Rationale

Orientation to Public Education reaches most School of Education students and usually comes early in students' college years. This is the time the Personal Development Seminars are most helpful to students.

The purposes of the course and the seminars are compatible

The seminars may strengthen the contribution the course makes to students and further improve its image among faculty.

The relationship will bring many more staff in the School of Education closer to 11-101 than is presently the case.

Pilot activity with the Personal Development Seminar indicates that students involved are aided in academic success and in developing positive attitudes toward self, faculty, and teaching.

Purposes of the Personal Development Seminar

1. Provide personal and academic advisement -- but not replace coordinators and their role.

2. Introduce students to various clinics and services available and arrange for orientation to these.

3. Analyze student strengths and weaknesses on basis of available test scores and through additional testing when desirable.

4. Develop study habits and skills; e.g., organization skills for study, taking lecture notes, writing papers, taking reading notes, preparing for tests, and utilizing cassette tape recorders.

5. Explore "schoolsmanship". This might include the when, where, why and what, and how of talking to professors, relating to professors, and obtaining assistance from professors. Exchange ideas regarding keys to success in specific courses, tests, etc., are helpful particularly if students who have taken the course or worked with the professor are involved.

6. Some small group counseling sessions (6 to 8 students) might be arranged with Counseling Center staff or volunteers from the Counselor Education Department. These sessions could provide additional

thrust in the areas of building positive self-images and realistic perceptions of one's self and the world about him.

7. Aid in the development of the learning center and the use of same by students.

8. Open up channels of communication between students and their professors.

9. Develop on the part of each student a strong feeling of identity with the School of Education -- its program, faculty, and building.

10. Develop an esprit de corps through social activities and ease of atmosphere in seminars.

11. Encourage articulation improvement and responsibility on the part of students through cooperative planning, avoidance of over-directiveness, and employment of group dynamic techniques.

Possible Operational Plans

Each staff member assigned a section of 11-101 might conduct two seminars for each section of 30 students. Perhaps some of these sessions might take the place of a discussion hour or laboratory hour.

Other School of Education faculty not assigned to sections of 11-101 might volunteer to accept two seminars of 15 students each.

After an initial period of perhaps four meetings, where purposes relating to student identification with the School of Education and building an esprit de corps are met and other purpose potentials of the seminars are explored and discussed, an opportunity could be provided for some students to drop out. All students would be welcome to remain and some strongly urged to remain. A reshuffling might then take place resulting in one group rather than two groups of 15 students per faculty member.

Second semester operation might mean discontinuing first semester groups, or continuing them and adding two new groups. This would depend upon the time availability and interest of faculty involved.

During the 1970-71 school year a brief record of activities and an evaluation of the operation might be requested of each faculty participant.

During the second semester of 1969-70 and the 1970 summer session opportunities for some in-service activity relating to the Personal Development Seminars will be available.

APPENDIX P

March 2, 1970

Proposal to the Executive Council of WSU-O

From: WSU-O Academic Success Committee

Concerning: A pilot program for "High Risk" students
Departmental seminars to improve teaching
Changes in academic advisement
Institutional studies
A Program for Educational research, development, and Service

The WSU-O Academic Success Committee supports the following recommendations and encourages the Exective Council to endorse them in principle in order that further planning might proceed and implementation might be effected. It is intended that individual students will benefit from the implementation of these recommendations. Hopefully, improved learning will lead to a reduced student attrition rate.

RECOMMENDATIONS

I. Two-Week August Freshman Seminar

It is recommended that the University conduct a pilot program for a minimum of fifty incoming freshmen students who qualify for admission to the university but who would be classified as high risk students on the basis of their high school performance and their ACT scores. The program would be conducted during the two-weeks prior to the beginning of registration week of September, 1970 and would provide an opportunity to increase effectiveness of reading and study skills through active involvement in seminar study and discussion of one or more relevant social or environmental issues. The students successfully completing theprogram would receive free room and board, a guarantee of one full year in school (but precluding dismissal for disciplinary reasons), and would be granted two academic credits for the freshman seminar. The program would extend into the academic year and would include a comprehensive evaluation.

The pre-fall program would include a concentrated reading-study program and instruction on the use of student services, contact with advisers who are specifically trained to assist "high risk" students, and a college level learning experience built around a relevant topic, but including lectures, examinations, and seminar-type discussions. During the fall semester groups of 10-15 students would be programmed into three core courses and would meet on a weekly basis to discuss adjustment problems,, study problems, and schoolsmanship.

Rough cost estimates of the program for 50 students would be approximately $8,000. Details of the draft proposal are attached as Appendix O1. Dr. Anita Dahlke and Dr. Robert Field have indicated an interest in assuming responsibilities for planning and implementing the program.

II. Departmental Seminars

It is recommended that the university conduct a series of seminar meetings for representatives from each of the academic and professional departments in order to stimulate interest in teaching and learning problems at WSU-O, to disseminate information about the data and facilities that are available at WSU-O to assist faculty, to develop competence in the construction of performance objectives and the design of better evaluation instruments, and to develop procedures for distributing and using student group profile data to faculty members in the departements. A faculty guidebook called "You and Your Students" would be developed and used in the seminars. The program would be conducted on an experimental basis this spring and next fall and would be subject to an evaluative study.

A more detailed outline of the suggestions for the departmental seminar approach is attached as Appendix B1. Dr. W. Sam Adams and Dr. Eugene Cech have indicated an interest in assuming responsibilities for planning and implementing the program.

III. Modifications in the Advisement System

It is recommended that the changes in the advisement system that have been recommended for students in the School of Letters and Science and the School of Education be implemented. Details of these plans are available through the deans of the Schools.

IV. Institutional Studies

It is recommended that studies on student probation, retention and dropout be initiated and kept current. The absence of complete regular reports on student success and failure have made evaluation and comparison difficult. The organization of responsibilities should be subject to study under Recommendation V.

V. Learning Resources Center

It is recommended that WSU-O plan for the establishment of a center for research, development and service to improve teaching and learning at WSU-O.

A. It is recommended that WSU-O conduct a planning study that will lead to the establishment of a learning resources center on the Oshkosh campus.

B. The study should be made by a small group of faculty and administrators selected by the president. The following should be involved in considerations of the committee though not necessarily on the committee:

AV services
AV instruction
Radio-TV
Academic Affairs Office
Psychology
Educational Psychology
Computer Center
Student Services
Improvement of Instruction Committee
Library
BESTT
Institutional Research
Deans' Offices

C. The committee should receive a charge prepared by the president with specific dates set for interim and final reports. The charge should request information and recommendations related to

1) objectives and rationale
2) function

    a. Research on learning and teaching
    b. Educational technology (development & service)
    c. Curriculum development (college and pre-college)
    d. Performance standards and evaluation
    e. Small grants program
    f. Remediation and supportive services

3) organization and structure
4) resources and cost
5) implementation and impact
6) evaluation

Appendix P 1

To: Members of the Academic Success Committee

From: Dr. Robert Field
Dr. Anita B. Dahlke

Date: February 26, 1970

RE: Draft of Freshmen Seminar Proposal to be Submitted to the Executive Council

(DRAFT)

Freshmen Seminar Proposal

Freshmen Seminar: An opportunity to increase effectiveness of reading and study skills through active involvement in seminar study and discussion of a crucial, current social issue.

Dates: August 24, 1970 to September 4, 1970

Students to be Involved: One hundred volunteer "high risk" students (fifty in experimental group and fifty controls), defined as those in the upper 3/4 of high school class rank but below ACT composite score 17, or above ACT composite score 17 but below the 25th percentile in high school class rank. (Similar students now being admitted on probation).

Suggested Alternative Incentives for Student Participation

1. 2 credits

2. Free room and board, no registration fee and an adjusted½ financial aids packet to compensate for loss of two weeks' summer job income.

3. One year in school guaranteed, not precluding dismissal for disciplinary reasons.

I. Goals

A. Short-term - Conduct a pilot study designed to foster the academic success of "high risk" students during their freshman year by strengthening their reading and study skills through supervised, active involvement in a summer program structured around a current social issue. The two-week period immediately preceding the fall semester was chosen to enable them to make a smooth transition into the academic year without a lapse of learning.

B. Long-term - If the short-term goals are achieved, offer a similar two-week freshmen seminar each summer which would be open to all admitted freshmen, would be self-supporting and should reduce freshmen attrition.

II. General Objectives

A. Orientation to physical campus.
B. Orientation to residence hall living.
C. Orientation to student services and university resources
D. Help students appraise their abilities, formulate realistic expectations for academic success and establish goals through counseling in groups and individual conferences.
E. Evaluate and strengthen reading and study skills through lectures, note-taking, textbook study, small group discussions, written assignments, quizzes and a final exam.
F. Increase students' knowledge of selected social issue and its relevance to college youth.
G. Through the inter-disciplinary approach to the selected social issue, expose students to possible areas of future study.
H. Plan tentative program of courses for freshman year through conferences with trained advisors.
I. Fall semester: (1) Schedule groups of 10-15 students into three core courses during first semester. (2) Plan weekly meetings with groups of 10-15 students to discuss adjustment problems, study problems and schoolsmanship.
J. Compilation of data for counseling of these and similar students.
K. Increase faculty awareness of student problems.

III. Evaluation

A. End of two-week seminar - questionnaire regarding strengths and weaknesses of programs, with feedback to instructors.
B. End of first three weeks in semester - individual interviews.
C. End of semester - review grades, dropout rate, review of second semester program in light of first semester academic progress and adjustment to the campus.
D. End of academic year - review grades, dropout rate and academic progress and adjustment to the campus during the freshman year.

Estimated cost:

Room and board and hall supervision (two residence Hall advisors) for fifty students	$5,500.00
Personnel:	
At least two speakers/discussion leaders	300.00

Two counselor/advisors	500.00	
Two Reading-Study Center staff members	500.00	
One librarian	50.00	
Field and Dahlke	1,000.00	
		$7,850.00

Appendix P 2

To: Members of the Academic Success Committee

From: W. Sam Adams

Date: February 27, 1970

RE: Draft of Academic Departmental Seminar Proposal to be submitted to the Executive Council

DRAFT

I. Purpose: To provide student background information to faculty members in order that realistic behavioral objectives and appropriate evaluation measures may be achieved. The desired outcome would be better program development and improvement in instruction.

II. Objectives:

A. Create a seminar consisting of faculty members from every academic department at WSU-O to discuss and develop behavioral objectives and suggest means of evaluation of these stated behavioral objectives.

B. Distribute a Student Group Profile to each faculty member interested in knowing more background information about his class early in the academic term.

III. Specific Design of Seminar and Its Activities

A. Organization of Seminar

1. Supervision of seminar would be the responsibility of the Testing Research and Services Department staff with members of the respective deans' staffs acting as resource persons.

2. One representative from each academic department would be asked to participate in the seminar.

3. One and a half hour meeting would be held every two weeks during the academic year.

B. Activities

1. Write and publish a booklet similar to that of MIT'S "You and Your Student." This publication would act as a text for the seminar.

2. Provide participating instructors with "Academic" tudent Group Profiles on one of their classes. The criteria for this SGP includes ACT composite score, high school rank in class and DRT reading index score.

3. Provide participating instructors with "Nonacademic" Student Group Profiles on one of their classes. Examples of criteria are socioeconomic status of students, educational aspirations of students, the community of students' hometowns, etc.

4. For upper division courses, provide seminar professors with Student Group Profiles of grade point averages of students enrolled in one of their classes.

5. The preceeding information (2-4) would be contrasted with departmental majors' characteristics, all students enrolled in departmental courses, all university freshmen, and freshmen nationally.

   These analyses would form the basis for developing student behavorial objectives and methods for evaluation.

IV. Student Group Profiles would be made available to any faculty member requesting them. Interpretive remarks on how an individual professor's class differs from other students in the institution would be included with each SGP.

Success of this program should encourage others to develop realistic student behavioral objectives and appropriate evaluation techniques.

V. Evaluation: Continual feedback from seminar professors and ideas from their respective departments will act as self-evaluation during the duration of the project. The visible outcome of the seminar would be the beginning of well defined educational objectives that will meet the needs of the students and the requirements of the professional staff.

VI. Estimated Costs: Although quite general, it would cost approximately $2.00 per professor for the Student Group Profile. If additional programming is required, the cost could be double to triple this expense.

The increased work load could be handled by the addition of a full-time faculty assistant.

Student Group Profile Seminar	$ 70.00
All freshman sections	1,000.00 - $1,500.00
Faculty Assistant	6,000.00

Appendix Q

ACADEMIC ADVANCEMENT COOPERATIVE

ARTICLE I - Name

The name of this organization shall be the ACADEMIC ADVANCEMENT COOPERATIVE.

ARTICLE II - Location

This organization shall be located at Wisconsin State University-Oshkosh.

ARTICLE III - Purposes

The purposes of this organization shall be to provide for the academic advancement of the members of the cooperative and to provide needed services for members of the cooperative.

ARTICLE IV - Nature of Organization

The cooperative shall be a nonstock, nonprofit organization, and no dividend or pecuniary gain shall be paid to any member thereof.

ARTICLE V - Membership

1. Any student enrolled at Wisconsin State University-Oshkosh shall be eligible for voting membership. Voting membership shall be granted to those students who submit a signed statement of support for the purposes and principles of the cooperative, and pay the dues as prescribed in the Bylaws.

2. A contributing member is any person or organization that shall donate services, property, and/or money to the cooperative in the amounts, kinds, and manner prescribed in the Bylaws.

ARTICLE VI - Dues

The schedule of dues and the manner of payment shall be as prescribed in the Bylaws.

ARTICLE VII - Voting

The Bylaws shall establish voting rights and regulations.

ARTICLE VIII - Directors

Conduct of the affairs of this Cooperative shall be vested in the Board of Directors. The manner or representation and method of election shall be as designated in the Bylaws.

ARTICLE IX - Officers

1. The officers of this Cooperative shall be President and Vice President. The officers shall be elected as prescribed in the Bylaws. The officers shall perform such duties as may be imposed by the Directors and as may be described in the Bylaws.

2. There shall be a position of Secretary-Treasurer which may be separated into the offices of Secretary and Treasurer in the manner prescribed in the Bylaws. This position shall be filled by the appointment of the President, subject to the approval of a majority of the Board of Directors.

ARTICLE X - Amendment of Articles

This Cooperative may amend these articles in the manner prescribed by Statute at the time of Amendment and in the manner prescribed in the Bylaws.

ARTICLE XI - Consultant

There shall be two offices of Faculty Consultant. One office shall be filled by a faculty member from the School of Education of Wisconsin State University-Oshkosh. The second office shall be filled by members of each of the remaining Schools of Wisconsin State University-Oshkosh, as prescribed in the Bylaws.

ARTICLE XII - Dissolution and Liquidation

1. Upon dissolution of this organization the balance of money remaining in the treasury after all outstanding debts are paid shall be used to establish an academic scholarship. The nature of this scholarship will be as defined in the Bylaws.

2. No member shall be entitled to any distribution or division of the organization's remaining assets upon dissolution.

ARTICLE XIII - Initial Registered Agent

The name and address of the initial registered agent is as follows:

Patricia A. Bentzler (Miss)
434 Church Avenue
Oshkosh, Wisconsin 54901

ARTICLE XIV - Initial Incorporators

There shall be 17 incorporators. The names, addresses, and initial positions of the incorporators are as follows:

Signature________________________
Patricia A. Bentzler
R.F.D. 2
Loyal, Wisconsin 54446
Title: Co-Chairman

Signature________________________
Janis Birkrem
Route 1
Deerfield, Wisconsin 53531
Title: Member Constitution Comm.

Signature________________________
Cynthia Block
P. O. Box 206
Waupun, Wisconsin
Title: Membership Comm.

Signature________________________
Daniel A. Burrus
3325 Meadowport
Brookfield, Wisconsin 53206
Title: Co-Chairman

Signature________________________
William W. Gray
815 Frederick Street
Oshkosh, Wisconsin 54901
Title: Chairman Constitution Comm.

Signature________________________
Kathleen Hansen
Route 2, Box 310
Hartland, Wisconsin 53029
Title: Chairman Membership Comm.

Signature________________________
Elizabeth Hartig
916 E. Irving
Oshkosh, Wisconsin 54901
Title: Member Constitution Comm.

Signature________________________
Scott Heatwole
R.R. 6
Port Washington, Wisconsin 53074
Title: Member Services Comm.

Signature____________________
Susan Joerres
515 East Armour Avenue
Milwaukee, Wisconsin 53207
Title: Chairman Services Comm.

Signature____________________
William Klaetsch
7313 W. Squire Avenue
Greenfield, Wisconsin 53220
Title: Member Cooperative

Signature____________________
Thomas La Fontaine
222 East Irving Avenue
Oshkosh, Wisconsin 54901
Title: Chairman Research Comm.

Signature____________________
Jeannette K. Lawver
1108 Hillview
Black Earth, Wisconsin
Title: Secretary-Treasurer

Signature____________________
Kristine M. Salscheider
Route 4
Green Bay, Wisconsin
Title: Chairman Fact Finding Comm.

Signature____________________
George Schraufnagel
R.R. 1
Brownsville, Wisconsin
Title: Parliamentarian

Signature____________________
Karen Thomas
6726 West Blue Mound Road
Wauwatosa, Wisconsin 53213
Title: Member General Comm.

Signature____________________
Nancy Tremble
820 Apple Tree Lane
Brookfield, Wisconsin 53005
Title: Member Services Comm.

Mattie Houston
3410 North 13th Street, Milwaukee, Wisconsin
(unavailable for signature)

Appendix R

A SELECTED BIBLIOGRAPHY OF MATERIALS CONCERNING COLLEGE STUDENT ATTRITION, UNDERACHIEVEMENT, AND TALENT LOSS

Barbara Fuhrmann August 12, 1969

A new joint program to help disadvantage students. Pomona Today, 1968, 4

A two-year program of special studies for transition to college, including seminars, orientation, tutoring and counseling, is described.

Altus, W.D. A college achiever and non-achiever scale for the Minnesota Multiphasic Personality Inventory. Jr. Applied Psychology, 1948, 32, 385-397

Two equated groups of students, achievers and non-achievers, were compared on the MMPI. It was found that non-achieving students displayed a trend of greater maladjustment on nine clinical scales, exhibiting greater femininity, immaturity, fearlessness, self-assertiveness, and manic tendencies. Non-achievers were most extraverted than achievers.

American Institute for Research in Behavioral Sciences, Palo Alto, California. College Bound Program, New York City. Secondary Program in Compensatory Education 4, 1969

Description of a program to train 2,000 to 3,000 disadvantaged secondary students to remain in a high-school enrichment program and then pursue higher education.

Ashcraft, M.G., An analysis of the effect of the high school curriculum upon college achievement. Las Cruces: New Mexico State University, 1967

It was found that high-school curriculum (college bound and general) was not highly critical, but that general intelligence and non-intellective factors were more decisive to college achievement.

Assum, A.L., and Levy, S.J. A comparative study of the academic ability and achievement of two groups of college students. Jr. Educ. Psychology, 1947, 38, 307-310

Two groups of underachieving college students - one designated as maladjusted and the other randomly selected - were compared on (1) ACE scores and reading and writing tests, and on (2) ratings on comprehensive examinations covering the year's work. Although the ACE score predicted achievement poorly, it was found that personal adjustment did bear a relationship to academic performance.

Beach, Leslie R. *Identifying the potentially successful among marginal college entrants. Final report.* Holland, Michigan: Hope College, August 1968.

Success in a summer program proved highly predictive of success in the freshman year for marginal college applicants.

Berger, I.L., and Sutker, A.R. The relationship of emotional adjustment and intellectual capacity to academic underachievement of college students. *Ment. Hyg., N.Y.*, 1956, 40, 65-77.

It was found that students with adequate personality adjustment had better academic performance than those who displayed some signs of emotional disturbance.

Blake, W.S., Jr. Does compulsory training help students on probation? *Personnel and Guidance Journal,* 1954, 33, 94-96.

Compulsory training of students on probation produces better academic achievement.

Blake, W.S., Jr. Do probationary college freshmen benefit from compulsory study skills and reading training? *The Journal of Experimental Education*, 1956, 25, 91-93.

Specific study skills training helps students achieve immediate goals.

Bloesser, Robert, *et.al*. Study skills project, spring 1968, Foothill College. California: Foothill Junior College District, 1968.

The report describes a project designed for remediation. A combination of four courses (two in English and two in psychology) were developed with team teaching and block scheduling. The basic rationale was that increased intraclass communication would help students' performance.

Blue, J.R., Jr. Effect of group study on grade achievement. *Jr. Educ. Psychology*, 1958, 49, 118-123.

Students who study in groups do significantly better than students who study alone.

Borislow, B. Self-evaluation and academic achievement. *Jr. Counsel. Psychology*, 1962, 9(3), 246-254.

Achievers and underachievers were compared on self-evaluation based on the Student Behavior Description. The findings did not support the idea that self-evaluation is a factor in academic performance.

Borow, H.A. A psychometric study of non-intellectual factors in college achievement. Unpublished doctoral dissertation, Pennsylvania State College, 1945.

Using the MMPI, it was found that academic achievement was related to motivation, satisfaction with curriculum, and efficient planning and working.

Boyce, E.M. A comparative study of overachieving and underachieving college students on factors other than scholastic aptitude. Diss. Abstr., 1956, 16(3), 2088-2089.

Underachievers, compared with overachievers at the University of Wisconsin, were found to have more deviate Hypomania scores on the MMPI, and were more likely to have fathers in the professions or in business.

Bridgman, D.S. Where the loss of talent occurs and why. In College Admissions, Vol. 7, The search for talent. New York: College Entrance Examination Board, 1960, pp. 30-45.

The study revealed that 55% of the boys and 70% of the girls in the top 30% of high school graduates do not complete college, and that approximately half of those in the top 10% do not live up to their capabilities in preparing themselves for a career.

Brown, H.S. An investigation of the validity of the Minnesota Multiphasic Personality Inventory for a college population and the relationship of certain personality traits to achievement. Unpublished doctoral dissertation, University of Minnesota, 1947.

Academic achievement is related to lack of maladjustment and to adequate personal and social relationships.

Brown, W.F. Student-to-student counseling for academic adjustment. Personnel and Guidance Journal, 1965, 43, 811-817.

The investigator reports success with the use of upperclassmen as freshman academic counselors.

Burgess, Elva. Personality factors in over-and underachievers in engineering. Abstr. of Diss., 1953, 16, 536-543, Pennsylvania State University.

In comparison with overachievers, underachievers displayed less intellectual adaptation and control, more repressed emotional reactions, less motivation for achievement, greater dependency, greater sociability, and greater satisfaction with their environment.

Bush, Dixon. Education for disadvantaged, Ohio: Antioch College, 1965.

Description of a program initiated at Antioch to provide disadvantaged secondary school students with high potential with a college education.

Bynum, Effie M. A selected ERIC bibliography on pre-college preparation of students from disadvantaged backgrounds. New York: Teachers College, Columbia University, 7, May 1969.

The report includes an annotated bibliography of recent pertinent research, and a description of sample programs.

Caple, R.B. Group study for low-achieving freshman males in a residence hall setting. *College Student Personnel*, 1969, 3, 164-168.

The investigator concludes that motivation to achieve is a strong factor in a student's success or failure, and that if motivation can be measured, a better position for attempting programs should exist. The study suggests directions for future research in measurement of motivation.

Carter, H.L.J., and McGinnis, Dorothy. Some factors which differentiate college freshmen having lowest and highest point-hour ratios. *Jr. Educ. Res.*, 1952, 46, 219-226.

It was found that high achievers were more likely to have definite vocational goals than low achievers.

Centi, O. Personality factors related to college success. *Jr. Educ. Res.*, 1962, 55(4), 187-188.

Based on the MMPI and the College Inventory of Academic Adjustment, it was found that high academic achievement was related to better personal adjustment.

Chambers, F.M. A College admission policy to reduce attrition. *Jr. Coll. J.*, 1961, 31, 250-254.

A basic standard college freshman curriculum may reduce attrition.

Cipperly, J.W. An effort to refine the concept of academic underachievement through the investigative case study approach. *Dissertation Abstracts*, 29, 8, 2957-A.

The investigator successfully refined the concept of underachievement into four classifications: chronic, situational, transitional, and masked or hidden.

Christ, Frank. Some university students and their ideal study environment...as they see it. Dec., 1966.

This doctoral study makes positive recommendations for the university administration (Loyola University, Los Angeles), based on data concerning study conditions collected from 214 male freshmen.

Clark, J.H. Grade achievement of female college students in relation to non-intellective factors: MMPI items. J. Soc. Psychology, 1953, 37, 275-281.

It was found that low grades were not related to any specific syndrome as measured by the MMPI, but that a selected group of items could distinguish nonachievers.

Clark, K.B. The most valuable hidden resource. Coll. Bd. Rev., 1956, 29, 23-26.

This follow-up study of Negro students indicated that those underprivileged students who are most likely to succeed in college are those with a combination of high aptitude and low socioeconomic background.

Cronbach, L.J. Studies of the group Rorschach in relation to success in the college of the University of Chicago. J. Educ. Psychology, 1950, 41, 65-82.

Underachievers and overachievers could not be distinguished on the basis of total Rorschach adjustment scores.

Crowne, D.P., and Stephens, M.W. Self-acceptance and self-evaluative behavior: a critique of methodology. Psychol. Bull., 1961, 58, 104-121.

The authors note that self-acceptance and its relation to other personality factors is not well understood.

Darley, J.G. Scholastic achievement and measured maladjustment. J. Appl. Psychology, 1937, 21, 485-493.

In seeking relationships among ability, attitudes, adjustment, and achievement, it was found that maladjustment can depress achievement from what would be expected.

Demos, George D. Analysis of college dropouts--some manifest and covert reasons. Speech presented at APGA, Dallas, 1967.

Analysis of 250 withdrawals revealed that: (1) significantly more males than females leave school; (2) a disparity existed between stated reasons and counselors' perceptions of reasons for leaving school; (3) care needs to be taken in the classification of reasons for student withdrawal.

Dessent, Shirley C. Group Counseling-plus-increasing school success of junior college students. California: Glendale Junior College, 1964.

Students on probation who took advantage of group counseling received significantly higher GPA's than their control group counterparts.

Dey, Charles F., and Jackson, Davis. *A Better Chance: an educational program sponsored by Dartmouth College*. New Hampshire: Dartmouth College, 1965.

Intensive academic training, close personal contact, small classes, and individual tutoring are the features of a summer program for disadvantaged boys who had received scholarships to independent schools.

Diener, C.L. Similarities and differences between overachieving and underachieving students. *Personnel Guid. J.*, 1960, 38(5), 396-400.

No significant differences between underachievers and overachievers were found on the Kuder, except in the area of artistic interest, which favored the underachievers. Most scales of the EPPS favored the overachievers.

Dowd, R.J. Under-achieving students of high capacity. *J. Higher Educ.*, 1952, 23, 327-330.

In a comparison of achievers and non-achievers of high ability, no relationship between achievement and adjustment could be found. Nonachievers studied less and reported curriculum dissatisfaction.

Drasgow, J. Underachievers. *J. Counsel. Psychology*, 1957, 4(3), 210-211.

It was postulated that acceptance of failure by collegiate underachievers expedites counseling.

Dysinger, Wendell S., and Hackman, J.R. Attrition in the liberal arts college. Indiana: Hanover College, 1966.

On the assumption that students with high levels of commitment persist in college while those with low levels of commitment drop out, four classes of students (persisters, transfers and returnees, "real" voluntary drops, and academic drops) were identified by multiple discriminant analysis.

Educational Projects, Inc., Washington, D.C. *These things have worked: materials drawn from the experience of Upward Bound Projects, 1966-1967*. 1967.

Reports from colleges and universities which conducted Upward Bound programs include descriptions of goals, procedures, and materials used.

Educational Services, Inc., Newton, Massachusetts. *Summer writing conference to continue development of materials in expression of ideas (English) and quantitative thinking (mathematics) to be used in pre-college centers for students from low-income families. Final Report*. 1967.

The report includes background information on pre-college and Upward Bound Centers, a description of how a unit was prepared, a sample unit, annotated lists of units, and a description of training sessions.

Egerton, John. High risk. *Southern Education Report*, 3, 7, 3-14, March 1968.

Data on the admission of high risk students to 159 institutions is presented and discussed.

Egerton, John. *Higher education for "high risk"* students. Atlanta, Georgia: Southern Education Foundation, 1968.

This report includes descriptions of out-standing programs to aid high-risk students, most of whom come from disadvantaged backgrounds.

Englander, M.E. Changes in affect attributable to instruction in reading improvement at the college level. *J. Educ. Res.*, 1960, 53, 231-236.

More favorable attitudes toward reading and toward the self were found on completion of a remedial reading course.

Fahey, G.L., and Ball, J.M. Objective evlauation of a program in general education. *J. Educ. Psychology*, 1960, 51, 144-151.

Students enrolled in a special core curriculum (interdisciplinary) achieved as well as or better than students in the regular curriculum.

Fishman, J.A. Unsolved criterion problems in the selection of college students. *Harvard Educ. Rev.*, 1958, 28, 340-349.

Non-academic criteria of success in college should be considered in admission.

Frederickson, M. Freshman fallout: its causes and a cure. *Sch. and Comm.*, 1963, 49, 27.

College instructors should attempt to organize material in a way comprehensible to freshmen.

Gebhart, G.G., and Hoyt, D.P. Personality needs of under- and over-achieving freshmen. *J. Appl. Psychology*, 1958, 42, 125-128.

On the EPPS, overachievers displayed greater needs for Achievement, Order, and Intraception. Underachievers displayed greater needs for Change and Affiliation.

Geisler, J.S. The effects of a compensatory education program on the self-concept and academic achievement of high school age youth from low income families. *Dissertation Abstracts*, 29, 8, 2520-A.

Students participating in the Upward Bound project at the University of Toledo had higher positive self-concept scores and higher GPA's than students who did not participate. Aspects deemed most beneficial were special classes, counseling, student-staff interaction, and field trips.

The General Curriculum, A Proposal for the Development of a Program for the Educationally Disadvantaged, Vol. 1 & 2, St. Louis Junior College District, 1965.

This pilot program attempts to meet the needs of educationally disadvantaged students on three levels: (1) basic skills; (2) personal enrichment; (3) adjustment to self and society.

Gilmore, J.V. A new venture in the testing of motivation. *Coll. Bd. Rev.*, 1952, 15, 221-226.

High achievers at MIT had better relationships with their fathers and closer identification with their mothers than did low achievers, based on a sentence-completion technique.

Gordon, E.W. Higher education and the disadvantaged. *IRCD Bulletin*, 1966, 2, 1+.

Systematic attention to the probelms of disadvantaged youth in higher education will require that we develop means of modifying attitudinal and learning patterns among young adults who are inefficient learners.

Gordon, Edmund W. *The higher education of the disadvantaged: new dimensions in higher education, number 28*. Durham, North Carolina: Duke University, 1967.

From a survey of the literature on higher education, the author concludes that means for identifying the needs of inefficient learners must be developed, and that remedial reading is not adequate to aid these students.

Gordon, E.W., and Wilkerson, D.A. Compensatory practices in colleges and universities. *Compensatory education for the disadvantaged*. New York: College Entrance Examination Board, 1966, 122-155.

Results of a questionnaire mailed to over 2,000 institutions in 1964 are discussed. The major generalization warranted is that a substantial number of institutions of higher education are attempting through a variety of approaches to help socially disadvantaged young people who could not otherwise do so to enter and succeed in college." Specific programs are presented.

Gowan, J.C. Factors of achievement in high school and college. *J. Counsel. Psychology*, 1960, 7, 91-95.

Factors crucial to talent development include environment, parental attitude, values, motivation and purpose, self-acceptance and self-confidence, maturity, socialization, and vocational adjustment.

Graff, Robert W. The relationship of the opinion, attitude, and interest survey to college achievement and academic adjustment factors. *Dissertation Abstracts*, 29, 9, 2959-A.

Although high school GPA was found to be the best predictor of college achievement, the Achievement Personality Scale of OAIS was found to be an important determiner of success for the high (and perhaps the low) ability student.

Graham, Jewel. The Antioch program for interracial education: the first three years, 1964-1967. Ohio: Antioch College, 1967.

This report discusses the program's purposes, selection procedures, and efforts to prepare educationally disadvantaged students for college work.

Griffiths, G.R. The relationship between scholastic achievement and personality adjustment of men college students. *J. Appl. Psychology*, 1948, 29, 360-367.

Based on the Bell Adjustment Inventory, it was found that there were no significant differences between high achievers and low achievers, but that men with unsatisfactory adjustment scores tended to get higher grades than men with excellent adjustment scores.

Guthrie, G.M., and O'Neill, H.W. Effects of dormitory counseling on academic achievement. *Personnel and Guidance Journal*, 1953, 31 307-309.

Individual counseling has no significant effect on college achievement.

Hackett, H.R. Evaluation of a program of counseling students on probation. *Personnel and Guidance Journal*, 1955, 33, 513-516.

Individual counseling has no significant effect on academic achievement in college.

Hall, W.E., and Gaeddert, W. Social skills and their relationship to scholastic achievement. *J. Genet. Psychology*, 1960, 96, 269-273.

Ability to deal with people in social situations is related (positively) to academic success.

Hammond, Bert D. "Project Open Future." *Pomona Today*, 65, 4, 6-9, January 1968.

Description of a summer residential and Saturday program designed to prepare disadvantaged junior high school students for higher education.

Harrington, Charles. Forecasting college performance from biographical data. *The Journal of College Student Personnel*, 10, 3, May 1969, 156-160.

The investigator concludes that a biographical data blank, used in conjunction with standardized tests, is worthy of consideration as a criterion of college admission.

Hendrix, O.R. The effect of special advising on achievement of freshmen with low predicted grades. *Personnel and Guidance Journal*, 1965, 44, 185-188.

The investigator reports a significant difference in the achievement of students with low predicted grades as a result of a special advising program.

Hillston, Henry T. *Report of the summer session of the College Bound Program, July-August, 1967*. Brooklyn: New York City Board of Education, 1967.

Description of a summer program designed to ease the transition of high-risk students from junior high to high school.

Hoehn, A., and Saltz, E. Effect of teacher-student interviews on classroom achievement. *J. Educ. Psychology*, 1956, 47, 424-435.

Interviews had a significant relationship to failure rate, those being interviewed failing far less frequently.

Holland, J.L. The prediction of college grades from the California Psychological Inventory and the Scholastic Aptitude Test. *J. Educ. Psychology*, 1959, 50(4), 135-142.

Personality variables associated with underachievement include poise and social skill, flexibility, admission of worries, impulsiveness, and low motivation.

Holland, J.L. The prediction of college grades from personality and aptitude variables. *J. Educ. Psychology*, 1960, 51, 245-254.

Nonintellectual factors found useful in predicting academic achievement include the superego, persistence, and deferred gratification.

Hopkins, J., Mallenson, N., and Sarnoff, I. Some non-intellective correlates of success and failure among university students. *Brit. J. Educ. Psychology*, 1958, 28, 25-36.

Nonintellectual factors associated with failure include illness, social reasons for university choice, parental pressure for curriculum choice, very early career decision, and few friends of the opposite sex.

Horrall, Bernice M. Academic performance and personality adjustments of highly intelligent college students. *Genet. Psychol. Monogr.*, 1957, 55, 3-83.

Results of the TAT and the Rorschach administered to high ability college students indicated that underachievement was related to personality disturbance.

Hoyt, D.P., and Norman, W.T. Adjustment and academic predictability. *J. Counsel. Psychology*, 1954, 1, 96-99.

Maladjustment can manifest itself in either overachievement or underachievement.

Institute for Services to Education, Washington, D.C. *Sample Upward Bound Programs*. 1965.

Summaries of successful 1965 Upward Bound programs, both urban and rural, are presented.

Iscoe, I. Probationers and honor students. *University Texas Arts and Sciences*, 1959, 3(2), 1-5.

Unrealistic perceptions of self and society are associated with low academic achievement.

Ivey, A.E. The academic performance of students counseled at a university counseling service. *J. Counsel. Psychology*, 1962, 9, 347-352.

Individual counseling apparently had a significant effect on performance of underachievers.

Jawa, M.S. Academic development, group dynamics, and motivation variables of disadvantaged students. *Dissertation Abstracts*, 29, 7, 2119-A

Academic development, group dynamics, and motivation variables of students in the 1967 Upward Bound Program at the University of Oregon were studied. It was concluded that the theories of lower innate intelligence, deficits and laziness due to the welfare system need to be challenged.

Jones, E.S. The probation student. What he is like and what can be done about it. *Journal of Educational Research*, 1955, 49, 93-102.

The probationary student is more dependent than the superior student and can profit from direct help.

Karnes, M.B., McCoy, G, Zehrbach, R.R., Wollersheim, J.P., and Clarizio, H.F. Efficacy of two organizational plans for underachieving intellectually gifted children. *Except. Child.*, 1963, 29, 438-446.

Homogeneous grouping may benefit underachievers.

Kausler, D.H. Aspiration level as a determinant of performance. *J. Pers.*, 1959, 27, 346-351.

External manipulation of level of aspiration or task-specific motivation may be effective in raising levels of achievement.

Kehas, C.D. Underachievement as a function of self-concept. Paper presented at American Personnel and Guidance Assoc., Washington, D.C., 1963.

Although self-concept appears to be related to achievement, the idea is not well enough understood to provide valuable information.

Kerr, Frances M. *ABC summer program, report 1966.* South Hadley, Massachusetts: Mount Holyoke College, 1966.

A transitional program for disadvantaged high school girls is summarized. Recommendations are included.

Kerr, Frances M., and Russell, Valerie E. *ABC summer program, 1967.* South Hadley, Massachusetts: Mount Holyoke College, 1967.

The 1967 summer program, with changes from the 1965 and 1966 sessions, is presented, discussed, and evaluated.

Kirk, Barbara. Test versus academic performance in malfunctioning students. *J. Consult. Psychology*, 1952, 16, 213-216.

Underachievers usually give unrealistic excuses for failure. They may be satisfying unconscious hostility directed toward demands for success (by a family member) and toward authority (professors).

Klingelhofer, E.L. The relationship of academic advisement to the scholastic performance of failing college students. *Journal of Counseling Psychology*, 1954, 1, 125-131.

Directive advising of college students has no significant effect on achievement.

Knaak, Nancy K. A study of the characteristics of academically successful and unsuccessful freshman women who entered Northwestern University in the fall of 1954. *Dissertation Abstracts*, 1957, 17(1), 304-305.

Based on the Guilford-Zimmerman Temperament Survey, successful students rated higher on seriousness and reflectiveness, and unsuccessful students rated higher on relationships with people.

Knoell, Dorothy M. Toward educational opportunity for all. Albany: State University of New York, 1966.

Guidelines based on original research are presented for establishing two-year state university urban centers for extending educational opportunities in New York.

Krumboety, J.D. and Farquhar, W.W. The effect of three teaching methods on achievement and motivational outcomes in a how-to-study course. *Psychological Monographs, General and Applied*, 71:1-26, American Psychological Association, Washington, 1957.

An instructor-centered approach, a student-centered approach, and an eclectic approach to teaching how to study were compared. College students used as subjects showed greatest motivation resulting from the eclectic approach.

Langer, L.H. An investigation in certain characteristics of the student who returns to college following academic dismissal. *Dissertation Abstracts*, 29, 7, 2122-A.

There apparently is no way to determine which failing students may be successful upon readmission. Characteristics differentiating successful and unsuccessful students were not determined.

Lum, Mabel K. A comparison of under- and overachieving female college students. *J. Educ. Psychology*, 1960, 51(3), 109-114.

In comparison with average-and overachieving students, underachievers are more easily discouraged, exert only minimum effort in courses not liked, and procrastinate more.

McClelland, D.C., Atkinson, J.W., Clark, R.A., and Lowell, E.L. *The achievement motive*. New York: Appleton-Century-Crofts, 1953.

Motivation for achievement, established early in life, is typified by competition with excellence, unique accomplishment, and long-term involvement.

McKeachie, W.J. Motivation, teaching methods, and college learning. In M.R. Jones (Ed.), *Nebraska Symposium on Motivation*. Lincoln, Nebraska: University of Nebraska Press, 1961, 11-146.

The investigator examined the interaction of the student's motives and strategies, various teaching methods, and the outcome in grades.

McKendall, Benjamin W. "Breaking the barriers of cultural disadvantage and curriculum imbalance." *Phi Delta Kappan*, 47, 7, 307-311, March 1965.

It is contended that most of the present enrichment programs benefit the academically able student who comes from a sound curricular background, and that this kind of curricular reform presents still another barrier to the student from a disadvantaged background.

McKenzie, J.D., Jr. An attempt to develop Minnesota Multiphasic Personality Inventory scales predictive of academic over- and under-achievement. *Dissertation Abstracts*, 1961, 22(1), 632.

In comparing normal- and underachieving students on the MMPI, it was found that underachievers tended to externalize conflict, to lack long-range goals, and to be impulsive and dependent.

McQuary, J.P. Some relationships between non-intellectual characteristics and academic achievement. *J. Educ. Psychology,* 1953, 44, 215-228.

No difference in education of parents was found between achievers and underachievers.

McQuary, J.P. Some differences between under- and over-achievers in college. *Educ. Admin. Supervis.*, 1954, 40, 117-120.

College achievers tended to have more definite vocational plans than underachievers.

Martin, G.C. Interviewing the failing student. *Journal of Educational Research*, 1952, 46, 53-60.

Interviewing the failing college student had no subsequent effect on achievement.

Martyn, Kenneth. *California higher education and the disadvantaged: a status report*. Sacramento: California Coordinating Council for Higher Education, 1968.

Compensatory programs and practices for disadvantaged students in California are presented, evaluated, and summarized.

Marx, G.L. A comparison of the effectiveness of two methods of counseling with academic underachievers. *Dissertation Abstracts*, 1959, 20(6) 2144-2145.

Underachievers were counseled individually and in groups. Those counseled individually made greater gains in GPA than either those in groups or those not counseled. However, the GPA for the total group counseled did not differ significantly from the control group.

Matire, J.G. Relationships between the self-concept and differences in the strength and generality of achievement motivation. *J. Pers.*, 1956, 24, 364-375.

In examing the relationship between self-concept and achievement motivation, it was found that a high need for achievement was related to a discrepancy between self-rating and ideal self.

Merrill, R.M. and Osborn, H.W. Academic overload and scholastic success. *Personnel and Guidance Journal*, 1959, 37, 509-510.

There is no significant relationship between academic load and achievement.

Michael, W.B., Jones, R.A., and Trembly, W.A. The factored dimensions of a measure of motivation for college students. *Educ. Psychol. Measmt.*, 1959, 19(4), 667-671.

A question concerning the correlation between achievers' values with those of their teachers is raised.

Middleton, G., Jr., and Guthrie, G.M. Personality syndromes and academic achievement. *J. Educ. Psychology*, 1959, 50(2), 66-69.

Low achievement was found to be related to needs for pleasure-seeking, extraversion, denial of shortcomings, and preoccupation with power.

Missall, Ellswerth. *To help them achieve, the academic talent search project*. City University of New York, Brooklyn College, 1966.

A two-year program of individualized instruction, counseling, and limited class size brought motivated disadvantaged high school graduates up to the level of beginning college freshmen.

Mitchell, J.V., Jr. Goal-setting behavior as a function of self-acceptance, over- and underachievement and related personality variables. *J. Educ. Psychology*, 1959, 50(3), 93-104.

Underachievers have inadequate concepts of their ability, the self-accepting over-estimating future accomplishment and the self-rejecting feeling 'no good at all.'

Monroe, Ruth L. Prediction of the adjustment and academic performance of college students by a modification of the Rorschach method. *Appl. Psychol. Monogr.*, 1945, No. 7.

The Inspection Rorschach Technique was found effective in predicting academic failure; students rated as maladjusted subsequently failed.

Montalto, Fannie D. An application of the group Rorschach technique to the problem of achievement in college. *J. Clin. Psychology*, 1946, 2, 254-260.

Although achievers possessed more signs of adjustment on the Rorschach than non-achievers, achievers displayed a neurotic trend which seemed pertinent to their success.

Moore, M.R. and Popham, W.J. Effects of two interview techniques on academic achievement. *J. Counsel. Psychology*, 1960, 7, 176-179.

Students given student-centered interviews achieved at a higher level than those given content-centered interviews or no interviews.

Morgan, H.H. A psychometric comparison of achieving and non-achieving college students of high ability. *J. Consult. Psychology*, 1952, 16, 292-298.

No relationship between academic achievement and MMPI profiles was found when achieving and non-achieving students were compared.

Pedersen, J.O. An exploratory study of nonintellective variables and related deviation from predicted academic performance. Dissertation Abstracts, 29, 8, 2533-A.

Under-, normal-, and over-achieving college freshmen were compared. It was found, among other things, that over-achievers perceived greater understanding and support from the college environment than did the others.

Pervin, Lawrence A. Dissatisfaction with college and the college dropout: a transactional approach. New Jersey: Princeton University, 1967.

Based on the rationale that human behavior can be best understood in terms of the interaction between the individual and environment, student dissatisfaction with college and probability of dropping out of college were measured.

Phay, John E. and McDonald, Douglas. Four years of academic achievement and disposition of the 1961-1962 entering freshmen at the University of Mississippi compared with American College Test scores. University of Mississippi, 1965.

It was found that there was little correlation between dropout rate and ACT score. Though the ACT predicted academic success well for those with high scores, it was found an inadequate predictor for those with scores below 18.

Pomona College, California. A new joint program to help disadvantaged students. Pomona Today, 65, 4, 5, January 1968.

A two-year program of special seminars, tutoring, and counseling to prepare disadvantaged students for college entrance is summarized.

Powell, W.J. and Jourard, S.M. Some objective evidence of immaturity in underachieving college students. J. Counsel. Psychology, 1963, 10(3), 276-282.

Underachievers displayed a lack of emancipation from their parents.

Quinn, S.B. Relationships of certain personality characteristics to college achievement. Dissertation Abstracts, 1957, 17(1), 809.

MMPI personality characteristics are poor predictors of academic success. Differences between over- and underachievers may actually be due to intelligence.

Reckard, E.C. Project Open Future. Los Angeles: California Association of Independent Schools; and California: Claremont Graduate School and University Center, 1967.

Projected activities to offer college counseling and academic enrichment to disadvantaged high school students with college potential are discussed in general terms.

Motto, J.J. A reply to Drasgow on underachievers. *J. Counsel. Psychology*, 1959, 6(3), 245-247.

Underachievers can be assisted through counseling regardless of whether or not they accept failure or feel a need for curriculum change.

New York University, New York. *Project APEX: a program for excellence in urban teacher education*. 1965.

Disadvantaged high school graduates are being trained to teach in slum schools. Work-study activities, a specially constructed curriculum, small group seminars, group counseling, and tutoring are some of the project's aspects.

Owens, W.A. and Johnson, Wilma C. Some measured personality traits of collegiate underachievers. *J. Educ. Psychology*, 1949, 40, 41-46.

Neuroses and psychoses are not necessarily associated with underachievement, but lack of maladjustment is associated with better achievement.

Panos, Robert J. and Astin, Alexander W. Attrition among college students. *American Educational Research Journal*, 1968, 5, 1, 57-72.

This longitudinal study of over 35,000 college freshman concluded that students are more likely to complete four years if they attend colleges characterized by peer cooperation, by a high level of student activity, by concern for the individual, and by permissive administration.

Passow, A.H. and Goldberg, M.L. Study of underachieving gifted. *Educ. Leadership*, 1958, 16, 121-125.

Informal counseling, personal guidance, and help in learning and study techniques proved a significant aid to achievement of underachievers.

Pearce, Frank C. *A study of academic success of college readiness students at the college of San Mateo*. California: San Mateo College, 1968.

The College of San Mateo's program designed to integrate minority students into the college and community is summarized and evaluated.

Pearlman, S. An investigation of the problems of academic underachievement among intellectually superior college students. *Dissertation Abstracts*, 1952, 12(1), 599.

Underachievers were found to be (1) not significantly different from achievers on adjustment scales; (2) characterized by preferences for manual activities; (3) somewhat unrealistic concerning future accomplishments.

Reed, C.E. A study of three groups of college preparatory students who differ in relative achievement. *Dissertation Abstracts*, 1955, 15(3), 2106.

High achievement may be related to student conformity to teacher values.

Rust, R.M. and Ryan, F.J. The relationship of some Rorschach variables to academic behavior. *J. Pers.*, 1953, 21, 441-456.

The degree to which certain moral and social values are accepted may be related to the persistence needed for high achievement.

Rust, R.M. and Ryan, F.J. The Strong Vocational Interest Blank and college achievement. *J. Appl. Psychology*, 1954, 38, 341-345.

Academic achievement was not found to be related to agreement between stated occupational aims and inventoried interests.

Ryan, F.J. Personality differences between under- and overachievers in college. *Dissertation Abstracts*, 1951, 11, 967-968.

Achievers and underachievers could not be separated on Rorschach adjustment scores. Family structure disruption was found to be associated with underachievement. On the SVIB, underachievers scored significantly lower on the Minister Scale ;and significantly higher on the Masculinity-Femininity Scale.

Sander, D.L. Experimental educational advising in men's residence halls. *Personnel and Guidance Journal*, 1964, 42, 787-790.

Educational advising by residence hall advisers has no significant effect on academic achievement.

Scales, H.A. Another look at the drop-out problem. *Journal of Educational Research*, 62, 8, April 1969, 339-343.

This study, initiated to discover factors associated with high drop-out rates, concludes that eleven of the eighteen factors studied are significantly related to the drop-out problem. Factors includes counselor load, planned counseling program, summer counseling services, follow-up studies, field trips to industry, empathetic teachers, class size, vocational guidance, and vocational training.

Serwer, Blanche L. The relation between parent-child interaction and inadequacy in college reading and study. Paper presented at Eleventh Annual Congress of the Inter-American Society of Psychology, Mexico City, December 1967.

Transcripts of group therapy sessions reveal that college reading and study probelms could be attributed to faulty parent-child interaction persisting into early adulthood.

Shaw, M.C. Need achievement scales as predictors of academic success. *J. Educ. Psychology*, 1961, 52(6), 282-285.

The self-concept is probably one of the most promising aspects of the personality of underachievers yet studied. Intervening variables in the life of a given person might prevent him from meeting a need to achieve.

Shaw, M.C. and Brown, D.J. Scholastic underachievement of bright college students. *Pers. Guid. J.*, 1957, 36, 195-199.

Underachievers displayed attitudes of hostility and hypercriticalness toward people, and resentment toward their parents. Parents of nonachievers tended to have carried lighter loads in school than parents of achievers.

Sherriffs, A.C. Modification of academic performance through personal interview. *J. Appl. Psychology*, 1949, 33, 339-346.

Students rated high on family tension, achievement need, and praise need benefit most from personal interviews.

Shuman, R.B. College dropouts: an overview. *J. Educ. Soc.*, 1956, 29, 347-350.

Extra-curricular and activities programs may reduce attrition.

Sinclair, Ward. Shoes don't matter when a bright kid is upward bound. *Southern Education Report*, 3, 6, 1968.

Upward Bound programs in Louisville, Kentucky, are described.

Skelton, R.B. Factors governing retention in college. *The Modern Language Journal*, 43, 3, 1959, 143-146.

Intelligence, sex, and at least two years of high school foreign language are examined as factors in college persistence. Findings indicate that (1) there is a high degree of correlation between intelligence and persistence; (2) women are significantly more persistent than men; and (3) students who present at least two years of high school foreign language study have twice the chance of surviving the freshman year as those who do not.

Southern Illinois University. *Experimental Freshman Year Program*. Carbondale: Southern Illinois University, 1964.

This is a two-year report of a four-year experimental research project designed to investigate probelms related to educating students from the lowest third of their high-school class. Special curricula, counseling, and remedial instruction are being provided and evaluated through a relatively elaborate system of grouping and subgrouping. Interim results and current bibliographies are included.

Spielberger, C.D., Weity, H. and Denny, J.P. Group counseling and the academic performance of anxious college freshmen. J. Counsel. Psychology, 1962, 9, 195-204.

Counseled groups of potential underachievers achieved at a significantly higher level than non-counseled groups. Attendance at counseling sessions also proved to be highly significant.

Stagner, R. The relation of personality to academic aptitude and achievement. J. Educ. Res., 1933, 26, 648-660.

Based on the Berneuter Personality Inventory, it was found that extreme personality trends apparently counteract advantages in aptitude. Personality influences the degree to which potentiality is used. High introversion scores are related to achievement; high extraversion scores to non-achievement.

Steinyor, B. Rorschach responses of achieving and nonachieving college students of high ability. Amer. J. Orthopsychiat., 1944, 14, 494-504.

Nonachievers appeared less well-adjusted than achievers on the Rorschach.

Strong, D. J. and Feder, D.D. Measurement of the self-concept: a critique of the literature. J. Counsel. Psychology, 1961, 8, 170-178.

A review of over 15 instruments used to measure self-concept indicated that the self-concept is a highly promising diagnostic device.

Summerskill, John. Dropouts from college. The American College. New York: John Wiley and Sons, 1964, 627-658.

This chapter reviews the literature concerning college attrition, enumerating factors associated with dropping out of college and suggesting directions for future research.

Swindle, William C. Longitudinal evaluation of the university academic performance of students previously enrolled in a program for improvement of learning techniques. Dissertation Abstracts, 29, 9, 3538-A.

It was found that a specific course in learning techniques significantly reduced the attrition rate of male freshmen at Texas A & M University.

Terrell, Glen and Wyer, Robert S. Non-intellective factors associated with scholastic achievement. Chicago: University of Illinois, Chicago Circle Campus, 1966.

Students who believed that academic achievement was a necessary condition for attaining their goals performed better than students who believed that academic achievement was not so essential.

Thorndike, R.L. The concepts of over - and underachievement. New York: Teachers College Press, Teachers College, Columbia University, 1963.

Upward Bound--War on talent waste at Indiana State University. The Teacher's College Journal, 38, 4, 1967.

This entire issue is devoted to a report and evaluation of the Upward Bound Program. The final article urges the development of an urban-orientad education.

Wedemeyer, C.A. Gifted achievers and non-achievers. J. Higher Education, 1953, 24, 25-30.

Fully 22% of students ranking in the 98th+ percentile in intelligence could be regarded as underachievers.

Weigand, G. Adaptiveness and the role of parents in academic success. Pers. Guid. J., 1957, 35, 518-522.

In comparing successful and unsuccessful students of comparable ability, it was found that successful students were more adaptive both in academic and in social life. The successful students were more likely to feel liked and accepted by their parents, and to have more permissive home atmospheres.

Weity, H. Clarke, Mary, and Jones, Ora. The relationship between choice of a major field of study and academic preparation and performance. Educ. Psychol. Measmt., 1955, 15, 28-38.

Males who had made vocational choices before entering college performed better academically than those who had not.

Wilkerson, Doxey A. Compensatory practices in colleges and universities. IRCD Bulletin, 2, 2, 1-3, March 1966.

Programs and practices designed to enhance the possiblity for success among socially disadvantaged students are reviewed. A bibliography is included.

Williamson, E.G. Scholastic motivation and the choice of a vocation. Sch. and Soc., 1937, 46, 353-357.

No significant difference in GPA was found between students who had made an occupational choice before entering college and those who had not.

Winborn, B. and Schmidt, L. The effectiveness of short-term group Counseling upon the academic achievement of potentially superior but under - achieving college freshmen. J. Educ. Res., 1962, 55, 196-173

In this study, counseling had a negative effect on academic achievement.

Winkelman, Sidra L. California Psychological Inventory profile patterns of underachievers, average achievers and overachievers Dissertation Abstracts, 1963, 23(3), 2988-2989.

Underachievers could not be differentiated from average- or overachievers on the basis of scale scores or profile patterns on the California Psychological Inventory.

Wright, E.W. A comparison of individual and multiple counseling in the dissemination and interpretation of test data. Unpublished doctoral dissertation, University of California, 1957.

Both individually and group counseled students improved more than non-counseled students.

Young, C.W. and Estabrooks, G.W. Nonintellective factors related to scholastic achievement. Psychol. Bull., 1934, 31, 735-736.

On self-ratings, the studious student tended to see himself as unsocial.

Zorbaugh, G.S. and Kuder, G.T. College grades and the vocational motives. School and Soc., 1937, 46, 62-64.

No significant difference in academic achievement could be found between students who had made an occupational choice before entering college and those who had not.